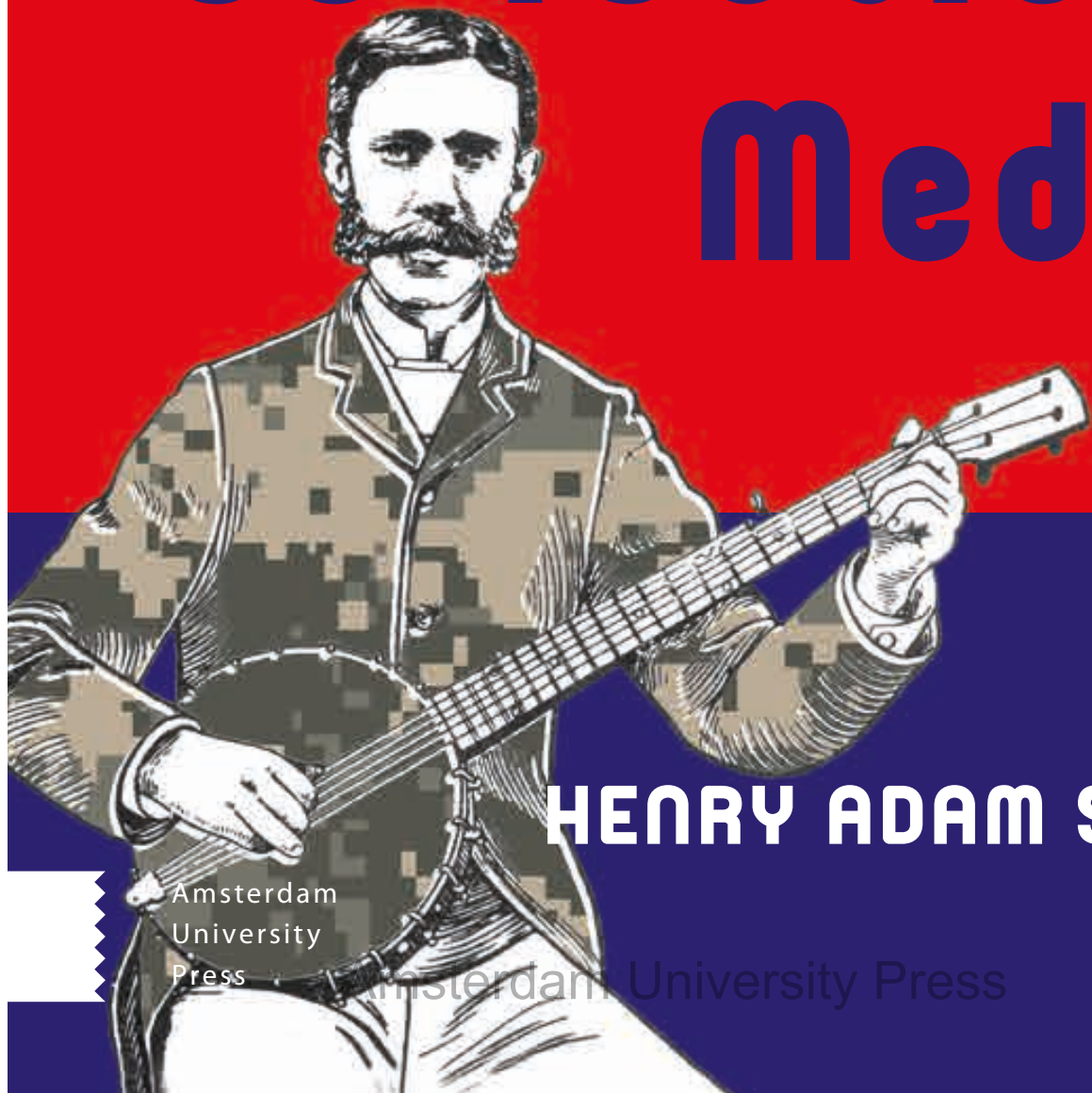


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American Folk Music as Tactical Media



HENRY ADAM SUEC

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American Folk Music as Tactical Media

by Henry Adam Svec

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Introduction

'A properly administered electronic system could carry every expressive dialect and language that we know of, so that each one might have a local system at its disposal for its own spokesmen. Thus, modern communication technology could become the prime force in man's struggle for cultural equity and against the pollution of the human environment.'

Alan Lomax¹

'Songs have proved a wonderful, flexible art form, going from one person to the other. It doesn't have to be written down; it can be memorized. And whereas mural painters need walls, dancers need floors, sculptors need warehouses, novelists need printers, and composers need symphonies – songwriters are lucky.'

Pete Seeger²

*'I also failed out of communication class for callin' up
Every day and sayin' I couldn't come.'*

Bob Dylan³

Of Signs and Singing

The film *Inside Llewyn Davis* (2013), the Coen Brothers's missive to the mid-century American folk revival, is not exactly of the loving variety. Our titular hero, Llewyn Davis, is capable of competent if not compelling performances of traditional ballads and blues, but he is also hip to the scene's hypocrisies: 'If it was never new and it never gets old, then it's a folk song', he says while finishing up a set at the Gaslight in Greenwich Village, halfheartedly genuflecting towards one of his community's peculiar understandings of authenticity.⁴ The night before, at the same venue, the flailing folk singer had launched insults at an earnest auto-harpist from out of town, an outburst for which he will now be punished by the performer's husband in an alley out back just as a young Bob Dylan takes the stage. (We can hear Dylan during the scene, singing his own song 'Farewell', as Llewyn crumbles to the ground.) 'Where's your corncob pipe? Are you wearing gingham panties?' Llewyn had yelled, drunk with sudden fury.

By the film's end, which is tragically also its beginning, it appears that, for now, poor Llewyn has taken to heart his encounter with the junkie jazzman he met en route to Chicago (masterfully played by John Goodman).

This character is perhaps the first to introduce Llewyn to the possibility that his own aesthetic framework is not the only one and, further, that the art made within his Greenwich Village scene can appear hokey to outsiders.⁵ ‘Where’s your ukulele? *We* play all the notes’, the jazzman had mocked. Llewyn takes satisfaction in distinguishing himself from his bourgeois friends uptown and from his ‘careerist’ and ‘square’ colleagues in the Village (namely his only fans, the Gorgeins, and a hyper-sincere singer-songwriter played by pop star Justin Timberlake). Yet, Llewyn has learned that distinction too is only a game of meaning-making.⁶ Llewyn’s existential crisis thus involves not only a failure to succeed in ‘the entertainment business’, but a failure to communicate, in particular and in general. Whereas folk authenticity is taken as an indexical imprint of folk-ness, the real thing unadorned and unmediated, Llewyn’s disturbance is perhaps caused by his recognition (or sudden belief) that performative signs are arbitrary signifiers – which can be written and recombined.⁷ As I. Sheldon Posen observes, ‘[t]he traditional folksong revival created an environment in which performers vied with one another in being “folkier than thou”’⁸; but Llewyn’s pain derives from his discovery that anyone can use a corn cob pipe and wear gingham panties – anyone can be folk (Dylan circa 1962 is a case in point). The film’s title ironically sounds out this dilemma, for there is nothing inside Llewyn Davis; it is exteriority (it is *outside* Llewyn Davis) all the way down.⁹

The theoretical disposition at the bottom of *Inside Llewyn Davis*’s implicit critique of the American folk revival is similar to that grounding much critical scholarly work on Western folk music in the humanities and social sciences over the past decades, which has given signification and the production of meaning a privileged place. We have traced connections between political and social movements and various American vernacular and ‘folk’ articulations.¹⁰ We have seen how tastemakers and gatekeepers have played constitutively mediatory roles in the invention of folk traditions, and social constructions of race, gender, and nation have been at the foreground of these explorations.¹¹ We have seen how a particular understanding of sound-recording technologies was mobilized by some of these intermediaries.¹² And we have seen how the ‘ideology of immediacy’ articulated by the folk revival has been incorporated by rock and popular music culture more broadly.¹³ Concepts from cultural studies and sociology, such as Raymond Williams’s ‘selective tradition’ and Pierre Bourdieu’s ‘distinction’, have directly and indirectly informed these analyses of the social construction of folk-ness at various times and places.¹⁴

Much of the work referenced above has been indispensable to my own understanding of the complexities of American ‘folk’ music, and this

book would not be possible without the groundwork already laid by these scholars. Robert Cantwell's *When We Were Good*, a poetic explication of the folk revival's cultural politics, has proved particularly instructive. Cantwell examines the ways in which American folk revivalism, including the performances and cultural works of participants like the Almanac Singers, Pete Seeger, and Harry Smith, constitutes a rich process of hybrid identity negotiation:

[L]ike other romanticisms [...] folk revivalism has both an epistemological and a political force undergirding its superstructure of fantasy, dream, and wish. In its very inventedness it embodies a structure of knowledge and an incipient system of affirmative values in which a critical historical perspective, an alternative or oppositional cultural politics, and even a prescriptive social-political program all become possible.¹⁵

Although the mass-commercial revival of the late 1950s and early 1960s appeared to empty the music of the political content that had been a trademark in the earlier 'folksong movement', Cantwell finds a complex politics in the genre's distinctly Americanist, performative texts and documents.¹⁶ He also pays attention to the location of the tradition within a distinctly modern, technological society, wherein the LP format and the new medium of television were inextricable components of the cultural fabric.¹⁷

Scholarly treatments of the American folk revival, the moment in mid-20th century America that young people turned to acoustic guitars and to various vernacular traditions, have illuminated the social and historical contexts of this complicated cultural field. But I would like to try something else – to examine aspects of this material using a different set of microphones. What if we actually had something to learn from the revival's understandings of communication, which is not a settled phenomenon of human societies but a malleable and thoroughly political concept?¹⁸ What if the American folk revival had something to teach us about *media*, even about digital media culture? I do not only want to deconstruct the folk revival, though that will happen too.¹⁹ I want to reverse-engineer its medial imaginary, to extract understandings of technological communication that might yet be useful, that might yet be worth singing. Bringing in institutional, discursive, historical, sociological, or dramaturgical perspectives might only be one way of listening to this rich techno-cultural sediment. 'If I had a hammer, I'd hammer in the morning', sang Pete Seeger.²⁰ In fact, he and his comrades had several hammers, and I want to root a few of them up in the pages that follow. We will dust them off, too, and see what they can do.

'Folk'

At first glance, the conceptual terrain of 'the folk' seems to be as far from 'media', and especially 'the media', as one can get.²¹ Indeed, the respective discourses of (mass) media and folk culture in the late nineteenth and early twentieth centuries evolved in constitutive opposition.²² The first collectors of 'people's poetry' in eighteenth-century Europe did not yet have a properly *mass* culture against which to distinguish their findings, but we nonetheless already see the organic and anti-Enlightenment contours of *Volk* sprouting here as if from the land, opposed to Reason, as cultural historian Peter Burke has uncovered; Herder and the Grimm Brothers saw the folk as 'natural, simple, illiterate, instinctive, irrational, rooted in tradition and in the soil of the region, lacking any sense of individuality [...]'.²³ In other words, 'the folk' form a channel without mediation, a body without a head, a solution for the plagues of consciousness and civilization.²⁴ This anti-modern Romanticism would persist in the work of English folk-song collector Cecil Sharp and in the influential efforts of Francis James Child; it appeared possible to find people outside of modernity – and that those people might be in possession of a culture (even if they themselves could not understand its beauty and power) that might possess a remedy of sorts.²⁵

Later pushers of folk culture throughout the Western world transposed these originary Romantic fears of Enlightenment Reason onto the degraded offerings of the nascent cultural industries; alongside the emergent discourses of modernism, such distinctions (between 'authentic' and 'inauthentic', 'nature' and 'media', 'art' and 'entertainment') were often mapped onto social distinctions as well.²⁶ In opposition to the trivial offerings of the mass-mediated cultural industries, the concept of 'the folk' thus appears as something eternal and solid, which 'heroic' and committed collectors, transmitters, and even writers could gather or present – even, ironically, when using mass media to do so.²⁷ From another angle, however, things had gotten productively 'problematic' in the United States when technological media entered the folkloristic picture. In 1933, John Lomax and his prodigious son Alan headed across the Deep South with a 300-pound Dictaphone machine soldered into their automobile; like their forebears, they were looking for music outside of *Gesellschaft* – in particular, for African-American singers who had not yet been 'contaminated' by radio or by phonograph records – but they were propelled by the cutting edges of the consumer society.²⁸ Unlike their forebears, however, at least one of the two Lomaxes was as interested in technology as he was in the 'messages' it might document or transmit. Similarly productive contradictions appeared

in the ‘proletarian renaissance’ brewing also in the mid to late 1930s in New York City, in which the younger, but not the older Lomax was involved.²⁹ The Kentuckian activist Aunt Molly Jackson astounded members of the Composers’ Collective with her stark and raw purity – she looked like a member of a mining community, which she was – and she was an inspiration for a broader shift in tactical approaches to folk music as an agitprop tool.³⁰ Rather than prodding the masses with difficult artworks, political artists then made use of the musical raw materials already familiar to *the people*: their folk music.³¹ As labour historian Richard Reuss describes this shift, ‘Lyrics were apt to be rough, unpolished, sentimental, and uncomplicated by sophisticated political dogma; at the same time, they contained an inherent vigor and occasionally caught the essence of folk poetry.’³² Yet, although Aunt Molly Jackson’s and Woody Guthrie’s champions and new friends, including Alan Lomax and Pete Seeger, idolized the dressed-down working folk and their tunes, they also idolized the various machines with and on which the proletariat toiled.³³ Guthrie in particular saw few boundaries between efficient modern machinery and the ‘authentic’ folk, a way of looking that led his writing into some interesting and unexpected places.

It is for this reason that the perceived revolutionary quality of Bob Dylan’s much-mythologized electrification is nothing short of amazing – the American folk revival was plugged in all along. The question for me, however, is not just to what degree did this or that folklorist or folk singer *use* media, which would require a more systematic history than the one offered here. I am interested rather in diagrams and dreams, in models and maps. Across the writings and projects of some of the scene’s most prolific and audible translators, what do media look and sound like? What kinds of knowledge and community can they make? To what degree do media encroach upon and trouble the power-laden subject positions of their masterful ‘users’ and ‘writers’? I am not looking for one master theory of ‘folk media’, but the general focus here is the ways in which the long American folk revival, beginning with the ‘proletarian renaissance’, but leading through to the mass-commercial success of the genre in the 1960s, has been variously attuned to media of contamination and noise, flesh and time, solidarity and communion. Vis-à-vis Web 3.0 digital networks wherein ‘filter bubbles’ enclose hyper-individualized pods of self-presentation and consumption,³⁴ the folk revivalists presented here offer a markedly enthusiastic and refreshingly optimistic articulation of ‘making do’ with the tools and networks ready at hand, of occupying spaces and producing disturbances in and through communication technologies. We can find in the American folk revival, then, paths untaken in media history but still waiting in the wings.³⁵

‘Tactical Media’

My aim is to find resonances between the American folk revival and media theory, which is a term that describes a loose collection of interdisciplinary thinkers who give the agency of media a central role in historical change, if not a unilaterally determining one.³⁶ Media theory is useful because the gatekeepers and tastemakers of the folk genre are thought to have longed for pure presence, for the absence of media.³⁷ Media theory, on the other hand, allows us to ask questions such as: How do particular media ecologies (or particular assemblages including both ‘old’ and ‘new’ communication technologies) ground the production of distinct articulations of, for instance, ‘authenticity’, ‘the folk’, or resistance? To what degree were Lomax or Seeger sensitive to the emergence of ‘new’ media in their work? Media theory from Harold Adams Innis to Friedrich Kittler allows us to formulate articulations of authenticity and ‘the folk’ that are not necessarily nostalgic but that are situated within dynamic and material media cultures.³⁸

Media theory itself is heterogeneous and complicated, and there is also a strand in this tradition that longs for presence and nature. Consider the discourse on ‘orality’ and the Romantic argument that the alienations inflicted by modern print culture can finally be resolved thanks to the integrated sensory awareness fostered by the ‘global village’.³⁹ The fetishism of the discrete, whole body that we sometimes see in McLuhan, or in Walter J. Ong’s writings, parallels the certainly present thread of nostalgia in the American folk revival; there is an apparent naturalness to the voice and the body ‘without media’, a deeply Christian ideology Jonathan Sterne has critiqued as ‘the audiovisual litany’.⁴⁰ The version of media theory mobilized in my book, however, is thoroughly post-humanist insofar as it posits the essential imbrication of human beings with and among communication technologies.⁴¹ As Félix Guattari puts it in reference to the orality and literacy debate, ‘Quite frankly, too marked an opposition between the oral and the scriptural seems hardly relevant. The oral, even the most quotidian, is overcoded by the scriptural; the scriptural, however highly sophisticated, is worked by the oral. Instead, we will begin with blocks of sensations [...]’.⁴² More on Guattari’s ‘folk’ approach below. For now, the point is that American folk revivalists indeed dreamed of various gardens, but the machine was never very far behind, indeed was generally always already there, lending a hand.⁴³

So I will consider certain folk revivalists as media theorists. But the curiosity of my folk revivalists is about more than media as such, or the aesthetic and epistemological opportunities they might create. My folk

revivalists were not only interested in what a mainframe computer, a folk-song broadcast, a Hootenanny, or a typewriter could do epistemologically or aesthetically; they were also interested in the kinds of political communities particular media assemblages might foster, and in the kinds of political structures they might resist or subvert (though these interests were explored with varying degrees of clarity and coherence). Thus, I want to retrieve these thinkers and practitioners more precisely as *tactical* media theorists. Also indebted in certain registers to Marshall McLuhan's later work on media warfare,⁴⁴ and thus indirectly also to Harold Adams Innis's consistent attention to power and warfare in his late work, the term 'tactical media' surfaced in the 1990s on the online forum Nettime, at the Next 5 Minutes conferences in Amsterdam, and in the writings of David Garcia and Geert Lovink, who documented some of these early discussions.⁴⁵ According to Lovink, 'Tactical media are post-1989 formations. They are a set of dirty little practices, digital micro-politics if you like. Tactical media inherit the legacy of "alternative" media without the counterculture label and ideological certainty of previous decades.'⁴⁶ Although various countercultural projects, alternative media, and 'culture jamming' constitute precursors and parallels,⁴⁷ tactical media theorists and practitioners have emphasized the interiority of 'tactical' resistance; as the military metaphor suggests, tactical media are intended to strike straight to the heart of hierarchical hegemons.⁴⁸

The 'tactical' in tactical media comes most directly from Michel de Certeau, as Garcia and Lovink make clear in their 'ABC of Tactical Media'. In de Certeau's *The Practices of Everyday Life*, the focus is on user agency over structure; whereas the structuralist impulse from Ferdinand de Saussure to Michel Foucault's *Discipline and Punish* had been on the ways in which sedentary power formations delimit and constrain the range of possible individual articulations, de Certeau emphasizes the numerous and sometime relatively modest ways in which people (users of language and of mass culture) reappropriate elements of those languages and structures to their own ends.⁴⁹ Not wanting to reincarnate previous (strategic) counter-hegemonic political movements, such as the vanguard party, Garcia and Lovink find in de Certeau's 'tactics' the perfect nihilistic solution: 'An aesthetic of Poaching, tricking, reading, speaking, strolling, shopping, desiring. Clever tricks, the hunter's cunning, maneuvers, polymorphic situations, joyful discoveries, poetic as well as warlike.'⁵⁰ The tactical media practitioner is flexible, mobile, and willing to try new things. 'Tactical Media are never perfect, always in becoming, performative and pragmatic, involved in a continual process of questioning the premises of the channels they work

with.⁵¹ One can become frustrated by the openness of the tactical media category. What is not tactical media? According to McKenzie Wark, this openness itself, and the focus on practice over theory, is part of the brilliance of the contribution: '[T]he most tactical thing about tactical media is the rhetorical tactic of calling it tactical.'⁵² Rather than waiting for the perfect theory of representation, Wark observes, tactical media is about getting down to the business of making culture politically.⁵³

Tactical media practitioners and scholars have proven particularly adept at both theorizing and practically tackling the challenges of contemporary activism from within distinctly digital cartographies. The novelty of the networked era and the need for new approaches to subversion and resistance (and the need for tactics over strategies) was perhaps most strongly pronounced in the early writings of the Critical Art Ensemble, wherein the virtual is abstracted, disembodied, hovering above the streets now 'evacuated' by power:

The rules of cultural and political resistance have dramatically changed. The revolution in technology brought about by the rapid development of the computer and video has created a new geography of power relations in the first world that could only be imagined as little as twenty years ago: people are reduced to data, surveillance occurs on a global scale, minds are melded to screenal reality, and an authoritarian power emerges that thrives on absence. The new geography is a virtual geography, and the core of political and cultural resistance must assert itself in this electronic space.⁵⁴

Much of the scholarly work on tactical media has followed the Critical Art Ensemble, to varying lengths, into so-called 'screenal' realities. Drawing on Autonomist Marxists Michael Hardt and Antonio Negri, Nick Dyer-Witheford and Greig de Peuter's book *Games of Empires* highlights the means by which global capital colonizes social and communicative life yet also provides the tools and capacities with which to disrupt this capitalist system. Dyer-Witheford and De Peuter find Hardt and Negri's 'multitude' active and resistant with a host of digital tools, including mods, machinima, 'tactical' games, and piracy.⁵⁵ A similar approach is taken in Rita Raley's study *Tactical Media*, which draws on Autonomist Marxist scholar Paulo Virno to consider the ways in which tactical media practitioners both occupy and disrupt the digital networks across which global capital circulates. As Virno and others have argued, the postmodern epoch of 'Empire' marks a shift from the material production of durable goods towards

the ‘immaterial’ production of images, services, and information; Virno’s ‘virtuoso’ has a privileged place in the productive chains of Empire – it is both the exemplary agent of exploitation and the potentially transformative political subject.⁵⁶ Raley considers a wide range of fascinating and important tactical media work with this digital virtuoso figure in mind, from the Department of Ecological Authoring Tactics’s work on migration and border power to John Klima’s aesthetic treatment of speculative finance, exploring how ‘[t]actical media operates in the field of the symbolic, the site of power in the postindustrial society.’⁵⁷ The work of Alexander Galloway, Eugene Thacker, Graham Meikle, Alexandra Renzi, Megan Boler, and others, has contributed to this vibrant discourse on the diverse international scenes wherein digital communication technologies are used to challenge the logics of digitally networked capital.⁵⁸ This indispensable work suggests that the contours of the digital point to the need for fundamentally new conceptions of space, time, and power, which tactical media discourse has in general sought to provide.

But does tactical media need to be digital? Does tactical media discourse need to emphasize the novel and the new? On this point, the tradition has been complicated and heterogeneous.⁵⁹ An embrace of the old and the embodied has especially gained ground since the 2011 wave of street protests and occupations across the globe, but this vector has been present all along. For instance, although they do emphasize the necessity of ‘the revolution in consumer electronics and expanded forms of distribution’ in their influential ‘ABC’ manifesto, Garcia and Lovink also highlight hybridity and the need for interdisciplinary experimentation: ‘[I]t is above all mobility that most characterizes the tactical practitioner. The desire and capability to combine or jump from one media [sic] to another creating a continuous supply of mutants and hybrids. To cross borders [sic], connecting and re-wiring a variety of disciplines [...]’.⁶⁰ This pragmatic attitude echoes McLuhan’s concept of ‘counterblasting’, whereby minor (and sometimes old) media (such as the printed book) could be called upon to disrupt media paradigms or to facilitate the possibility of renewed awareness.⁶¹ In a revision of earlier writings in his book *Dark Fibre*, Lovink further emphasizes the possible variety of forms, including ‘local TV, pirate radios [...] theatre, zines, street demonstrations, book culture [...]’.⁶² In other words, the low-fi and the ‘old’ medium can be just as sharp (or blunt, presumably, depending on the situation) a tool as the high-fi or ‘new’. Even the Critical Art Ensemble have softened on this point over the years, having given more recognition to ‘live’ forms of dissent and having recognized that we need now to look below the ‘screenal reality’ of mainstream digital culture.⁶³ In *Digital Resistance*,

despite the title, they articulate a more layered and subtle conception of communication against power: 'No cultural bunker is ever fully secure. We can trespass in them all, inventing molecular interventions *and* unleashing semiotic shocks'.⁶⁴ Elsewhere in the book, they retreat from their earlier position entirely: 'Organic being in the world must be reestablished as the locus of reality, placing the virtual back in its proper place as simulacra'.⁶⁵ Indeed, the concept of tactics as understood by this scene (with its emphasis on mobility and surprise attacks) has led to a productive willingness continuously to reconsider anew the situation on the ground, including the meaning and utility of 'the tactical' itself.⁶⁶

We have already found some room in the tactical media toolbox for the American folk revival: Alan Lomax and Pete Seeger, for instance, moved horizontally across the fields of media power and made use of what they could when available, from IBM mainframes to network television. As we will see, they operated pragmatically, picking up and putting down channels (from the voice to multimedia databases) according to the shifting situation on the ground. 'By any media necessary', as the Critical Art Ensemble puts it.⁶⁷ It is also worth pointing out that the folk revival has had enough direct and indirect influence on tactical media to warrant its inclusion in a new archaeology of the tactical media event, if we consider the impression that the Civil Rights Movement's use of folk song made on a young Abbie Hoffman, or the Yippies' collaborations with The Fugs (initially signed to Folkways) and the topical songwriter Phil Ochs, or John Lennon and Yoko Ono's folk-song-fueled and McLuhanite 'Bed In' for peace.⁶⁸ As Eric Kluitenberg has pointed out, there are also striking similarities between the image in which the Critical Art Ensemble articulated their 'By Any Media Necessary' slogan (a man in a cityscape holding a sign) and Bob Dylan's famous performance in D.A. Pennebaker's documentary film *Don't Look Back*, in which he holds and drops cue cards of his own lyrics to 'Subterranean Homesick Blues'.⁶⁹ The point here is that the usual quick genuflections in tactical media histories towards the historical avant-garde, the Situationists, or even the Yippies, are incomplete.

There is also the more important question as to what degree the tying of tactical media to the American folk revival will constitute a productive opening of the former, for there has been much disagreement about whether or not 'tactics' should continue to be a category through which to think about politically engaged media.⁷⁰ The Critical Art Ensemble acknowledge that there has been a push towards strategic concerns and towards a renewed progressive Marxism, but they ultimately come down on the side of tactical media as a concept of continued importance, among other reasons because

social actors resistant to neoliberal hegemony continue to lack a territory and because there remains a danger in social movements that seek to ossify and institutionalize.⁷¹ On the other hand, McKenzie Wark has convincingly (yet sympathetically) questioned the suitability of this approach for an age in which logistical and strategic concerns have become ever more urgent:

Try lots of different tactics. Borrow from art history, from media theory, think of it as a temporary activity which need not make overarching claims or defend its legitimacy. See what works. But the unresolved problem is how to resource such a field of practice. How are resources to be allocated? How are networks to be sustained?⁷²

Ned Rossiter and Geert Lovink too have critiqued the ‘old’ concept of the tactical in their studies of ‘organizational networks’, which value durability over the formerly beloved quick temporality of tactical media.⁷³

More recent engagements have expanded the very concept of tactical media, and this is the position that I too will take up in this book. Michael Dieter, recognizing that tactical media seems to have been all but completely co-opted by the circuits of contemporary production and exploitation, has examined the need for a deeper and more ‘environmental’ approach.⁷⁴ He critiques Raley for not exploring ‘anything more-than-human’ then proceeds to insist on tactics as ‘multiplicity’, encouraging us to approach our diagrams of digital and networked technologies in a still-tactical way.⁷⁵ By approaching tactical media from a Deleuzian angle, Dieter shifts the question of tactics away from strictly technical networks and onto a more messy terrain of forces and opportunities. A similar move is made in Eric Kluitenberg’s book *Legacies of Tactical Media: The Tactics of Occupation from Tompkins Square to Tahrir*. Animated by 2011’s ‘Movements of the Squares’, Kluitenberg recasts tactical media interventions as hybrid intersections of technologies and forces, and he gives the fleshy human body its due role: ‘It is the body, and the body alone, that can act as a libidinal force breaking through the containment of the virtualized “circuits of drive” that attempt to capture the restless desire of the contemporary subject for the encounter in public with the unknown other.’⁷⁶

The discourse of tactical media, with its pragmatism, flexibility, and embrace of the low-fi and the amateur, makes it an excellent tradition to rub up against the American folk revival, in order to help us better to appreciate the unique concerns and dispositions of the field. But it is also possible that considering the American folk revival as tactical media could help to expand the potentialities of the latter. I thus see the relationship of

‘the folk’ to ‘tactical media’ in this study as one of both guest to host and host to guest: we will see the discourse of tactical media lend concepts and diagrams to our folk revivalists, but we will also see our folk revivalists inhabit these diagrams and concepts, hacking them in turn on occasion, anticipating problems and offering some remedies. This rubbing or mixing together of the American folk revival and tactical media will be productive given the latter’s tendency to fetishize, not only the digital, but the new. My long view of tactical media will allow us to jump out of the progressive and evolutionary narrative of media-historical change that tactical media discourse absorbed in the 1990s cyber-cultural heydays.⁷⁷ Indeed, the most interesting moments for me are not where American folk and tactical media come together, but where they break apart – where my folk revivalists seek to ground, for instance, the perpetuation of ‘electronic disturbances’ not ephemerally but over time, or where they operate not only rhetorically or symbolically but through embodied agents, or where their mediatized writings and projects appear to undo their own authority as folkloristic or aesthetic guerilla ‘heroes’, or where they do not shy away from the affordances of organization. Still, I want to make clear that this thickening and deepening of tactical media by the American folk revival will be carried out less in a spirit of critique than of cooperation. A fellow traveller, I merely wish to add some more tools to the table.

Archaeology

As mentioned above, one of the key theorists for the tactical media scene in the 1990s was Michel de Certeau, who, in *The Practice of Everyday Life*, pays attention to the ways in which agential consumers can circumnavigate disciplinary apparatuses through the creative use of commodities and language; picking up on this theme, Lovink’s and Garcia’s initial 1997 manifesto also highlights the ways in which users put consumer gadgets to use in new and challenging ways.⁷⁸ However, I want to dig beneath this tactical media inheritance of taking tools for granted, including the tools of the symbolic.⁷⁹ Following Michel Foucault and the field of media archeology that he has inspired, we consider concepts like media, tactics, and the folk not as stable objects to be used but as discursive constructions.⁸⁰

Going further than Foucault, however, and thus following many who have also made this move, from Friedrich Kittler onward, we are also interested in the material medial grounds of discourse, in the relationships between any given paradigm in which information is defined, stored, or

circulated, and the particular writing, recording, and processing machines that do this cultural-epistemic work.⁸¹ Kittler calls these historical paradigms ‘discourse networks’, which he defines as ‘the network of technologies and institutions that allow a given culture to select, store, and process relevant data’.⁸² We can safely say that Kittler’s focus on synchronic over diachronic lenses, and his connection of communications technologies to strategic military concerns, leads him away from de Certeau’s playful tactics; but it seems to me that, in the same way that Foucault’s studies of modern discipline and de Saussure’s work on structure were indispensable starting points for de Certeau, 21st-century tacticians need to reckon seriously with media apparatuses of capture and containment. For, if Kittler is even partly right, and our perceptual apparatuses, both ‘human’ and ‘machinic’, are spread out across a diverse yet quickly digitizing terrain, then tactical media practitioners need to think more deeply about the contingent assemblages of inscription, storage, and transmission technologies that undergird the symbolic exchanges that are generally their focus. It has seemed as though some accounts of tactical media, Raley’s book in particular, have sought to resurrect Jürgen Habermas’s ‘public sphere’ as an ideal model for political media interventions, wherein informed and rational interlocutors speak (or write/programme) truth to power.⁸³ She does not explicitly engage with Habermas, but Raley is drawn to ‘critical’ interventions and performances, even defining tactical media as a kind of scholarly practice: ‘[I]n that their tinkering, playing, and visualizing are themselves a kind of academic criticism, they are not so far removed from my own discourse.’⁸⁴ Raley’s book is indispensable and has helped me to appreciate better some fascinating new media artworks, but it perhaps backgrounds the layered strata of discourse networks necessarily undergirding contemporary culture and activism.⁸⁵

At the same time, however, though Kittler’s concept of ‘discourse networks’ informs certain swaths of the analysis below, ‘discourse networks’ are for me much less stable entities than in some strands of ‘German’ media archeology. It is not that I disagree with the analytical power of the concept; it is only that, being a folk fan, I prefer the discord and friction that can sound out and across systems of writing, recording, and transmitting, and other types of social, technical, and imaginary machines. Thus, following media theorists and cultural historians such as Jussi Parikka, Anna Munster, and Matthew Fuller, I want to inject a strong dose of Gilles Deleuze and Félix Guattari into my media-archaeological expedition.⁸⁶ In Parikka’s archaeology of computer viruses, he negotiates an uneasy but productive synthesis, considering both ‘those abstract machines or diagrams that

connect heterogeneous parts together' and the complex combinations 'where the material is immanently pierced by the incorporeal and the discursive'.⁸⁷ Along these lines, there has also been a strong influence made on the pages below by feminist contributions to post-humanist theory, from Donna Haraway's landmark manifesto to Rosi Braidotti's work, which honour the identity-dissolving yet affirmative exchanges between human and a-human.⁸⁸ Haraway famously identifies the cyborg as an image that unsettles by plugging in and across, and one might identify the models of communication unearthed here as variations on Haraway's cyborg myth.

The name that I give my approach is 'folk archaeology', which presupposes that 'the folk' does not refer to a natural state of being but rather to 'diagrammatic' or 'abstract' machines as Deleuze and Guattari describe them: 'The diagrammatic or abstract machine does not function to represent, even something real, but rather constructs a real that is yet to come, a new type of reality.'⁸⁹ This conception of machines thus blows apart distinctions like natural and cultural, folk and mass; both technologies as well as more apparently ephemeral compositions can be conceived in this post-humanist light. In fact, social machines can precede and even determine the material technical machines.⁹⁰ As Guattari writes in *Chaosmosis*, 'Technical machines install themselves at the intersection of the most complex and heterogeneous enunciative components.'⁹¹ Folk archaeology is thus about locating and amplifying diagrammatic machines wherein both folk and media assemblages converge and collaborate, and explicating these circuits. Whereas John Lomax, then, was looking for songs, we folk archaeologists follow the folk (itself a machine or set of machines) across a wide and unstable ecology populated by both analog and digital discourse networks and the bodies and voices (among other things) with and into which they commune.

We also dig down into cracks that have not seen light in awhile. Informed by Siegfried Zielinski's 'deep time' approach to media history, each cut is not necessarily meant to reveal the way things have been or to find anticipations of 21st century media trends. On the contrary, the folk-media sediment we tunnel through is often more complex and striated than that of mainstream contemporary digital culture.⁹² Zielinski terms his work '(an)archeology' to emphasize his attention to rupture and diversity.⁹³ Following Zielinski, we will not be interested in a linear narrative of the American folk revival, though we will work with discourses. Our path will be much more subterranean and dirty, seeking the unfamiliar within the familiar, the complex within the 'primitive', and the leaky within the stable.⁹⁴ Zielinski defines media as 'spaces of action for constructed attempts to connect what is

separated',⁹⁵ and this indeed opens up the field of media research to all sorts of strange and formerly uninvited guests.

This project is indebted to the spirit in which Zielinski's *Deep Time of the Media* was written, which is 'in a spirit of praise and commendation, not of critique'.⁹⁶ But there are some problems in Zielinski's work that I also need to address, for, despite his reverence for Michel Foucault, Zielinski demonstrates a clear affinity for the romantic 'author-function' that Foucauldian discourse analysis has so thoroughly historicized, a problem that has admittedly seemed to carry over into the present research.⁹⁷ Remember that, for Foucault, authorship is not natural or self-evident, but is produced by contingent networks of discourse and practice; following his observations we could speak, then, of a folk 'author-function' as theorized initially by the Grimm Brothers or Herder, which emphasizes collaboration and collective creation, or a more modern (and copyrightable) 'author-function' that emphasizes interior, individuated creativity.⁹⁸ Zielinski has been critiqued for the ways in which he has seemed to take the latter for granted. For instance, Jussi Parikka has questioned Zielinski's 'deep time' of media history for giving attention almost exclusively to male inventors, each considered by Zielinski to be a 'genius', and Parikka in turn examines how the media art of Zoe Beloff both contributes to and complicates Zielinski's approach by introducing gender into the media-archeological picture.⁹⁹

It can be said that I too give too much attention to 'heroes' in this book, whose whiteness and maleness continue to enable their reaches across the cultural, political, and academic fields of a racist and patriarchal society. However, although I risk further mythologizing the brands of Alan Lomax, Pete Seeger, Bob Dylan, and Woody Guthrie, my own work could more generously be conceived as a tactical manoeuvre or occupation. I look for coagulations and dams of techno-cultural possibility, and have found them pooling around 'authors' of various diagrams of communication, authors whose 'ingenuity' was enabled by the historical power structures of their time. Yet, this act of looking need not take authorship or originality as eternal or transcendent, especially when the 'original, authorial' contributions obsolesce authorship and originality as such, which is often the case with my weird folk revivalists. Future work on the media-theoretical dimensions of the American folk revival will have any number of other directions to take. This initial attempt has sought merely to take the most visible and legitimated producers of text and to trace and track the meanings of media therein. In other words, I found a loose thread and I pulled, and up came some machines, some with relatively promiscuous allegiances.

The Plan from Here

Chapter 2 reconsiders American folklorist and broadcaster Alan Lomax as a tactical media theorist. I examine how Lomax's engagement first with the phonograph and then with digital computers came to inflect his understandings of 'the folk' (or at least how this tendency is inscribed across his writings and projects). I also place Lomax in conversation with cybernetics and information theory, which he encountered directly through his teachers Margaret Mead and Raymond Birdwhistell. Moving against the grain of mainstream articulations of digitality, Lomax carried his phonographic interest in voices into his computational experiments, pointing us towards a tactical, utopian assemblage of digital networking and affective embodiment.

Lomax can help us to explore issues of inscription and archivization. One of Lomax's early assistants in the archives, Pete Seeger, can help us to explore transmission, which is the focus of chapter 3. Seeger was an influential thinker in the revival, bringing with him a deep pedigree (he had travelled with Woody Guthrie and performed in both the Almanac Singers and the Weavers). He was active at the Newport Folk Festival as a board member and performer; he wrote for both *Sing Out!* and *Broadside* (among many other publications); and he released dozens of records in the 1950s, the 1960s, and beyond. Although Seeger took aim at McLuhan in particular in his *Sing Out!* column 'Johnny Appleseed Jr.', by drawing on John Durham Peters I will explore how Seeger's theory of mediatized resistance is a subtle and sophisticated one that often parallels and even anticipates some of McLuhan's claims. Resistance for Seeger is figured as an act of mediatized broadcasting: the tool itself thus productively contaminates that which it relays in a hybrid convergence of folksy, McLuhanite 'counter-blasting'. Yet, this is not a mere anticipation or parallel. Seeger also managed to balance his dissemination theory with a deep concern for time.

Chapter 4 highlights a more recent segment of the thread. First, I analyse the meaning of technology in Bob Dylan's writings and image (focusing primarily on his 1960s output) and in the discourse surrounding Steve Jobs and Apple Inc.; Dylan and Apple/Jobs share roots in Romanticism, both having been worshipped for their individualistic authenticity (Dylan for his own authenticity, Apple for the individualized expression it makes possible for the consumer, thanks to its late hippie/artist co-founder). Drawing on Kittler's concept of 'discourse networks' and Félix Guattari's notion of 'faciality', I consider the obfuscating power of this particular channelization of creativity. In the final section of the chapter, however, I

return to some of Dylan's songs and writings, uncovering a post-humanist Dylan who properly acknowledges his position as a mere relay within a larger circuit of discourse production.

In chapter 5, I step back from the designs of the American folk revival while still carrying forward, I hope, some of its tactical media energy. While I was Media Artist in Residence at the University of New Brunswick, I developed the New Brunswick Laboratory of Imaginary Media Research + Design. Intended as a low-stakes workshop and drawing jam, participants and I built impossible and unfeasible communication machines together. The workshop was motivated by tactical media's insistence on a do-it-yourself work ethic, but also by the longstanding collaborative mythos of 'the folk'. This chapter is perhaps an intermission from the historical research conducted elsewhere in the book, but one in which some of the stakes of the project and the applicability of the findings can be demonstrated.

Chapter 6 seemed an opportune moment to explore in more detail the concepts of authenticity. After explicating some recent theoretical work on this concept, I side with those philosophers, in particular Charles Taylor, who have recommended that we be wary of discarding the fraught concept altogether.¹⁰⁰ Following Taylor and Karl Marx, I consider 'authenticity' in a general and machinic way, as that which we might become together. With this post-humanist conception of the authentic in hand, I then unpack the complex articulation of authenticity found in the writings of Woody Guthrie, finally connecting his imaginary machine 'The Hootenanny' up with the more recent 'People's Microphone' of the Occupy movement.

Finally, in chapter 7, I take the opportunity to reverse the perspective developed throughout the book. Here, we will consider the American folk revival as strategic media. Whereas my folk revivalists have generated a subterranean discourse of media, which it has been my project to locate and to amplify, there is another convergence point connecting 'the folk' to digital culture, which is the highly influential rhetoric around participation, collaboration, community, and networking online. This chapter thus is intended to thicken our 'archeological' approach to 'folk media', giving a fuller and deeper portrait of the landscape.

1. Alan Lomax's Deep Rivers of Digitality¹

*'Record grooves capture the vibrations of real bodies whose stupidity,
as is well known, knows no boundaries.'*

Friedrich Kittler²

*'The modern computer, with all its various gadgets, and all its wonderful electronic
facilities, now makes it possible to preserve and reinvigorate all the cultural
richness of mankind.'*

Alan Lomax³

A Cybernetic Song Collector

'Cybernetics' describes a diverse collection of research and debate happening in the United States after the Second World War that pointed, in several respects, beyond previous research paradigms.⁴ 'Cybernetics' derives from a Greek word for 'governor' or 'regulator', and the work of Norbert Wiener and other 'first-order' cyberneticists was, in this initial moment, concerned generally with ways in which networked assemblages, involving both human and machinic contributors, can achieve order or stability despite potentially ongoing threats to the system, a state of being that these thinkers referred to as 'homeostasis'.⁵ From thermostats, to automated weaponry, to maze-running mice, to human beings, to self-reproducing automata (all experiments generated by the scene), exemplary organisms were able to receive data from their environment and act accordingly.⁶

How is it that a machine and a human could come to cooperate on a project? A key concept in the early waves of cybernetics was information, which famously received competing definitions in the work of the two most influential contributors. Claude Shannon defined information as a measurement of the possibilities within a given communicative situation, thus tying the concept to the earlier thermodynamic notion of entropy (the more information, the more possibilities).⁷ Wiener, on the other hand, defined information as the negentropic condensation of disorder into a concrete set or unit of transmissible data: 'Information is a name for the content of what is exchanged with the outer world as we adjust to it, and make our adjustment felt upon it.'⁸ In Wiener's definition, we see the more

influential version in digital culture more broadly – information as message, as content – a conception that ‘reifies’ information, as Katherine N. Hayles has argued, which thus moves it away from a total situation and towards an weightless object that can be exchanged, controlled, bought, or sold.⁹

Cybernetics from one angle seems a loose hodgepodge of thinkers and scholars who got together periodically for what became known as the Macy Conferences, and their concerns and discoveries seem confined to the technological and ethical dilemmas of the postwar United States.¹⁰ Yet, there is a growing body of literature exploring the deep repercussions that cybernetic theories have had both on our conceptions of machines and on the actual pathways of technological development. The now widely critiqued yet still pervasive idea that information can be extracted from its material carrier – that, for instance, human beings even could be informationalized and transported into alternate material channels (digital networks, for instance) is indeed one clear legacy.¹¹ More recently, Nick Dyer-Witheford’s book *Cyber-Proletariat* examines how cybernetic concepts such as homeostasis and feedback have also influenced the direction of contemporary networks of production and exploitation.¹² The broader social and economic consequences of especially first-order cybernetics, which had not yet taken into account the fact that the observer too is part of the system, have even pervaded popular programming. BBC documentarian Adam Curtis’s popular and acclaimed films, especially *All Watched Over By Machines of Loving Grace*, ties this movement to Ayn Rand’s objectivist philosophy, global financial strategies, and the general decline of working class politics.¹³

Yet, hegemonic strands within information theory and cybernetics have also been influential in media archaeology, primarily via Friedrich Kittler’s work.¹⁴ In the ‘Afterword’ of *Discourse Networks*, Kittler clearly signals his indebtedness to Claude Shannon as he unpacks the components of his ‘discourse networks’ concept: ‘An elementary datum is the fact that literature (whatever else it might mean to readers) processes, stores, and transmits data, and that such operations in the age-old medium of the alphabet have the same technical positivity as they do in computers.’¹⁵ A few paragraphs later, Kittler points to Shannon directly, explaining that information theory’s five functions (‘source, sender, channel, receiver, and drain of streams of information’) can be ‘occupied or left vacant by various agents.’¹⁶ Kittler’s method in action gives priority to the channel, for, through close readings of literature, he highlights the fundamental distinctness of the competing modern discourse networks (phonography, cinematography, and typewriting), but Claude Shannon’s move away from meaning and reception is equally

important as McLuhan's 'the medium is the message' axiom.¹⁷ Kittler figures himself as a techo-cultural engineer, opening up black boxes and revealing their functions, whether they operate continuously or discretely.

We can see in Kittler's treatment of digital 'discourse networks' the concepts of homeostasis and feedback too. Although they appear less than ideals than as dystopian tendencies, for Kittler the digital epoch is marked by a kind of absolute negentropic cyclone. In *Gramophone Film Typewriter*, again deploying Shannon's five functions as a guiding methodological principle, Kittler sees an all-encompassing convergence of 'formerly distinct' information streams on the digital horizon: 'Once movies and music, phone calls and texts reach households via optical fiber cables, the formerly distinct media of television, radio, telephone, and mail converge, standardized by transmission frequencies and bit format.'¹⁸ For Kittler, this is not just an aesthetic shift to be studied but a profoundly ontological one; the eventual domination of the digital discourse network (which is not complete, according to Kittler, but clearly underway) constitutes a new system in which both media and humans are obsolesced: 'Instead of wiring people and technologies, absolute knowledge will run as an endless loop.'¹⁹

Kittler's take on digitization has been critiqued (more on this below), but there has also been a push to reconsider the various complexities of information theory and cybernetics, and the ways in which these fields' concepts fermented and circulated across institutional, disciplinary, and national borders. Hayles uncovers contestations and competing notions of information already within the Macy group; for instance, British cyberneticist Donald Mackay resisted the dominant notion that meaning and context were insignificant to the study of communication.²⁰ Indeed, as a growing body of scholarship has begun to suggest, both major and minor inheritors of cybernetic concepts have done astonishing and sometimes radical things with the legacy, making the field not a settled ideological apparatus but a battlefield of concepts and diagrams, not all of them compromised by the military-industrial complex or late-modern informational capitalism but, in some instances, pointing beyond these structures.²¹ The current chapter contributes to this productive tactical reconsideration of cybernetics by analyzing Alan Lomax, the American folklorist and song collector, as a media-theoretical cyberneticist whose ideas and projects both overlap with and sometimes exceed those of Shannon, Wiener, and Kittler.

What do cybernetics, information theory, and their contemporary resonances in media theory have to do with folk music? Quite a lot, it turns out. Alan Lomax was still a teenager when, with his father John Lomax in 1933, he 'discovered' the singer Huddie 'Lead Belly' Ledbetter in a Louisiana

penitentiary; he also went on to have a long career as a field recorder, folklorist, journalist, broadcaster, producer, software designer, and writer. Lomax was concerned with 'the folk' and the most faithful means by which it might be documented, transmitted, and fed back into itself. A tactical media adept before the letter, Lomax believed that technology constituted a key component in his quest to document and disseminate the voices of the marginalized folk he encountered on his field trips; he figured the centralized, corporate mass-media system of his time as a monolithic and polluting force, but he tried to effect a hybrid reversal of this unidirectional flow by recording folk music with top-of-the-line technologies and then relaying the documents back to both mass audiences and the folk themselves via radio, film, and even the personal computer.²² Yet, as for the cyberneticists, some of whom were his teachers,²³ the concepts of channel and information for Lomax were critical. What kind of information is important in a folk song? What counts as informational? Is it the notes, the words, or is it something deeper, something corporeal, which only automatic writing machines (phonographs) can document? What happens when one begins, as Lomax did, to migrate the grand project of preserving and disseminating 'the folk' over to IBM mainframes and then personal computers?

To unpack Lomax's engagement with the above questions, we will read through the two epochs that can be demarcated across his career as a folklorist and song collector, Phonographic Lomax and Computational Lomax, considering the degree to which Lomax seems attuned to the distinct 'discourse networks' grounding his quests in these epochs. This will give us a fresh angle on an important figure in the history of media theory, for, although the significance of sound recording to both John and Alan Lomax has been discussed,²⁴ Alan Lomax's cybernetic and post-humanist renderings of machines have not been given sufficient attention. To what degree did the technical networks Lomax worked with come to determine the very object of his quest? To what degree is he sensitive to these connections in his writings?

There is much in Lomax that we would do well to leave behind, most urgently the primitivism and Orientalism that variously run through his texts,²⁵ but what is of interest in this chapter are the ways in which he anticipates some of the claims of critics of cybernetics and information theory, such as Mark B. Hansen and N. Katherine Hayles, who have problematized the notion that information can be abstracted away from its material carrier.²⁶ Contra Kittler and his dystopian digital flatline, Lomax's 'deep digitality' plugs the folk (which exceeds numbers and letters) into informational networks, an act that he believed would challenge the hegemony of global media conglomerates via the conjunction of always-embodied voices with

digital systems.²⁷ Lomax's writings on computational folk are elusive and fragmentary, but they can nonetheless offer us things with which we might rethink our own mediatizing horizons.²⁸

Alan Lomax, Sound Writer

In the early 20th century, just as the phonograph was dazzling audiences across the world with the new registers of inscription it made possible,²⁹ many ethnographers and collectors of American folk songs were still operating within the logics of print culture.³⁰ Song collectors, after all, were looking for *songs*, which can be written down and printed, not voices or bodies; as Regina Bendix has pointed out, the text became the locus of authentication for the Romantic folklorists of the nineteenth century, a legacy that would persist.³¹ For instance, Cecil Sharp's introduction to his influential *English Folk Songs from the Southern Appalachians* gives us a brief glimpse of the transmission model that grounds his interactions in the field: '[I was] accompanied throughout by Miss Maud Karpeles, who took down, usually in shorthand, the words of the songs we heard, while I noted the tunes.'³² The speed of the musical event requires an efficient language, but, nonetheless, the data sought is *meaningful*. Elsewhere, he writes: 'The singers displayed much interest in watching me take down their music in my note-book, and when at the conclusion of a song I hummed over the tune to test the accuracy of my transcription they were as delighted as though I had successfully performed a conjuring trick.'³³ In Kittler's view, the phonograph made it possible for the first time to conceive of documenting 'the real' (sound recording allowed for the inscription of signals that the alphabet could not encode, including the noises of bodies), but Sharp seems unwilling to explore this new media landscape.³⁴ Not coincidentally, Sharp was rather contemptuous of his informants, and his disregard for the singers he relied on had much to do with his class biases and elitist fears of massification.³⁵ Yet, from an information-theoretical perspective, there is also a basic contempt here for the material channel of the voice, a desire only for the information it happens to preserve or transmit.³⁶ Sharp has black-boxed his informants and their tools of storage and transmission, which are, in fact, their selves.

John and Alan Lomax too were collectors of songs, which are indeed made up of words and tunes, but, unlike Sharp, who was forced to hastily scribble down notes and words with his assistant, the Lomaxes had a machine do the work.³⁷ The use of the phonograph in ethnographic field research goes back

to the late nineteenth century.³⁸ Alan Lomax seems to have been especially sensitive, however, to what Wolfgang Ernst describes as ‘the (unconscious) replacement of the vocal-alphabetic code by an electromagnetic flux of electrons’.³⁹

Young Lomax figures primarily visual media, including print, as only one channel within the complex ecology of the field of folk music. Yet, it is the aural channels of the voice and the singing body to which his attention seems to have been constantly drawn.⁴⁰ “‘Sinful” Songs of the Southern Negro’, one of his first publications, explores the pleasure of what Roland Barthes describes as the ‘grain’ of the voice, the fleshy ground *beneath* the articulation of linguistic meaning. According to Barthes, ‘The “grain” is the body in the voice as it sings, the hand as it writes, the limb as it performs’.⁴¹ Lomax too perceives the black box not only to see how it contains and constrains content but because it, too, is a subject to behold:

This woman’s quartet which she herself had organized and led, was by far superior to any other group we had heard. None of them, in all likelihood, could read, and certainly none of them had had the slightest training in music; but their harmonic and rhythmic scope and pattern, their improvisations, were unusual and beautiful. Their lower lips big with snuff, they swayed back and forth, eyes closed, to the beat of their own singing, a beat accentuated by the spatter of tobacco juice on the rough pine floor.⁴²

Words and notes only go so far to document ‘the spatter of tobacco juice on the rough pine floor’ or ‘unusual and beautiful’ improvisations. Lomax seems to struggle between that which can be represented and that which exceeds mere signifiers; his prose reaches out to document sense, sound, and place. Elsewhere in the essay, he describes a performance that we can only imagine Cecil Sharp vainly trying to document, with or without his secretary:

There was Burn-Down in the middle of the floor shouting a rhythm from which the melody had practically disappeared, beating his ‘box’ until it seemed the thing would fly to pieces at the next stroke of his yellow hand, and literally held up by the bodies of the dancers around him, who were still shuffling with bent knees in the monotonous and heavily rhythmic one-step. Out in the moonlit yard again, away from the house, where the hound pup lay asleep in the dust, the separate sounds of feet and voice and strings disappeared, and in their place was a steady wham-wham that seemed to be the throbbing of the house itself.⁴³

Lomax's informants, as well as the landscape, blend into a physiological gestalt. The notion that there is something more to music than notes and words, something deeper, would continue to interest Lomax throughout his career. In 'Reels and Work Songs' he writes, 'These records are not to be listened to for text or tune so much as for the wildness, freedom, and rhythmic beauty of their contents.'⁴⁴ In 'Folk Song Style', he considers the incompleteness of Western musical notation: 'The more refined the scores, the more certainly the essence of the exotic music escapes through the lines and spaces.'⁴⁵ Elsewhere in the paper, he derisively refers to the field of 'comparative musicology', which is 'based on study of these distorted skeletons', referring to Western notation systems.⁴⁶ And, in 'A New Hypothesis', he again wonders explicitly whether Western music notation systems are suited to the study of folk music.⁴⁷

Of course, Lomax was not only interested in the non-signifying dimensions of folklore and music. His book on Jelly Roll Morton, for instance, incorporates meaningful narrative. Lomax asks Morton about his personal history, which gets written down, which circulates as interpretable texts.⁴⁸ An interest in narrative seems to be the primary motive governing his interviews with Woody Guthrie at the Library of Congress as well.⁴⁹ There is, however, simultaneously a world of sense beyond or beneath the level of signification: liquid and material registers that the recording apparatus itself seems to have a privileged capacity to 'understand'. As Lomax writes of his session with Morton,

The amplifier was hot. The needle was tracing a quiet spiral on the spinning acetate. [...] A gravel voice melting at the edges, not talking, but spinning out a life in something close to song. Each sentence almost a stanza of slow blues [...], each stanza flowing out of the last like the eddies of a big sleepy Southern river where the power hides below a quiet brown surface.⁵⁰

The machine is figured as a central component of the 'pre-phonographic' event, the gravel voice spinning, like a record, right along with the acetate. The edges melt, writes Lomax, and the rich discourse he records is *not just talking*. Indeed, as in his description of Morton's performance, metaphors of 'the water' or 'the river' often stand in as descriptors of the data Lomax was trying to capture with his machines. In a letter sent from the Bahamas to Oliver Strunk at the Library of Congress, he writes: 'Here, you see, there is a live, flowing, vital folk culture and the collector lives in a continual state of confusion & exhilaration. [...] Songs & people pour in on us all day every

day until we have to stop them in our weariness.⁵¹ With his phonographic ears, Lomax seems to have occasionally found the monstrous bandwidth of the folk to be overwhelming and in need of sorting out, somehow.

To be sure, Lomax's notion of the field-recording interaction is saturated with a racialized primitivism. As Patrick B. Mullen claims in his discussion of American folklorist Newbell Niles Puckett, the notion in American folklore that speech and sound are more authentic than writing is attributable to racialized stereotypes of African-Americans as exotic Others: 'If blacks sang from the soul in an illiterate oral tradition and whites from the song books in a literate tradition, then civilization had cut whites off from the spiritual dimension of life.'⁵² In Lomax's aesthetic valuation of folk music's channels, too, we can see evolutionism and primitivism variously articulated: 'Alan Lomax definitely thought that black otherness held the secret of sensual and spiritual renewal, and this was related to his own sense of whiteness as being incapable of experiencing pleasure.'⁵³ It was not only Black Otherness that held this power for Lomax; like many of his contemporaries in the field of anthropology, he was drawn, in general, to those who appeared to be outside of modernity.⁵⁴

It is also worth pointing out, however, that Lomax seems to have been sensitive to the fact that it was not he who was actually doing the perceiving in the field, that it was a machine inscribing the data and that this machine was not only a transparent window but also an agent of sorts: 'A sound-recording machine should visit men in the camps and record the songs they have made up'; 'The department's recording machine has had an interesting time this summer [...]'; 'The machine now walks and talks properly again [...]'; 'This work is to be done by a modern field recording machine, with the idea in mind of getting down in the most accurate fashion the folk tunes and folk styles of the region [...]'.⁵⁵ Lomax's sound recorders are folkloristic automatons, workers able to infiltrate domains that had previously been unreachable to him, prosthetic extensions of the folklorist: 'This machine draws its power from a set of batteries, and records electrically on aluminum or celluloid discs. Its play-back arm, which enables the singer to hear his song immediately after it has been sung, won us more songs than anything we said, more than all the cigarettes, tips, and compliments we distributed.'⁵⁶ On the other hand, the human folklorist in turn occasionally comes to resemble an object in Lomax's writings, a mere component within a larger network of mediatization: 'I realized right then that the folklorist's job was to link the people who were voiceless'.⁵⁷ Elsewhere: 'Now, I propose that we [folklorists] should be two-way bridges and form a two-way inter-communication system'.⁵⁸ When the object of

inquiry is the voice, the machine becomes the collector; meanwhile, the folklorist becomes an interactive channel, an interface between the folk and the machine. The messiness of these relationships is highlighted by one of Lomax's most often reproduced photographs (taken by Shirley Collins), in which we cannot see his hands, his gaze too averted out of the frame.⁵⁹ Surrounded by headphones and hovering beside his inscription machine, his face here is not a window to a subject but a thick component within a modern and mobile system.

The idea that sound-recording inscriptions can constitute a *present* reproduction of a sonic event has been critiqued and historically situated by several scholars.⁶⁰ According to Alan Williams, for instance, sound recording always entails selection and representation; sound recording constructs the object it claims to document much like in other forms of discourse: 'Microphones being more like ears than they are like rooms (they function as points and not as volume), it is never the literal, original "sound" that is reproduced in recording, but one perspective on it, a *sample*, a *reading* of it.'⁶¹ Lomax, on the other hand, does often seem to believe that sound recording had given him direct access to the sounds and bodies he documented, which Filene and Szwed point out.⁶² Yet, folk music also occasionally seems to be only a node distributed across the network of technological media that have made possible its documentation. Thus, despite his Romanticism, Lomax also exhibits what Jonathan Sterne has called a 'network sensibility', which is a sensitivity to the location of authenticity within media networks.⁶³ The essay 'Tribal Voices in Many Tongues', for instance, begins with an anecdote about a truism Lomax would have us reconsider:

I suspect it was on a tourist's visit to Naples in the nineteenth century that some sentimental literary gentleman opined, 'Music is a universal language.' This absurd notion has bedevilled collectors of folk and primitive music ever since. I only wish I could hold the author's head firmly against the bell of my loudspeaker while I played him a series of albums.⁶⁴

Truth, in this imagined scenario, is not to be found in the field, but rather in proximity to the bell of his loudspeaker; authentic originals are what he often seemed to think he was after, but he seems to have been equally drawn to machinic inscriptions – to the discs, tapes, microphones, and speakers upon which he relied.⁶⁵

Evoking Michael Taussig's poetic exploration of the field-recording interaction in colonial Latin America,⁶⁶ Lomax does appear to enjoy, through his perception of the 'primitive' Other's experience with technology, his

own culture's repressed enchantment with mimetic machines: 'It is always a dramatic moment for any one when his own voice comes back to him undistorted from the black mouth of a loud speaker. He seems to feel the intense and absorbing pleasure that a child experiences when he first recognizes himself in a mirror.'⁶⁷ But which one of the three agents in this web constitutes the folk? Lomax comes to rupture the dichotomies we might wish to impose on his thought, because the folklorist's murky assemblage of technology and embodiment seems to have made who or what is inside modernity, and who or what outside, occasionally difficult to determine:

[O]nce the field recording habit takes hold of you, it is hard to break. One remembers those times when the moment in the field recording situation is just right. There arises an intimacy close to love. [...] A practiced folk song collector can bring about communication on this level wherever he chooses to set up his machine. [...] Although *my primitive tape recorder* disintegrated after that first trip, it sang the songs of my convict friends so faithfully that *it married me to tape recording*.⁶⁸

In anticipation of Donna Haraway's poetic explication of the cyborg body, such vivid renderings of Lomax's erotically charged yet faithful coupling with technology seem to dissolve boundaries between nature and culture, machine and human, and primitive and civilized. As he had confided in a letter to Jerome Wiesner in 1941, 'The machine worked beautifully, although some over-cutting resulted from the effect of the intense heat on the cutting gear. It was so much fun to run that I could hardly keep my hands off it.'⁶⁹ It is not a mere anecdote that Lomax's first wedding and honeymoon took place on a field-recording expedition in Haiti.⁷⁰ Bride, folk, work, play, husband, phonography, love, singing – what is the difference?

'Self-Liquidating Cans'

The 'deep river of song' that Lomax sought to dam up via his role at the Library of Congress almost drowned him, and he began to experience a strain of what Jacques Derrida has called 'archive fever'.⁷¹ In the 1940s and 1950s, he recorded massive volumes of music from around the world – from Spain, Italy, Haiti, Bahamas, and elsewhere – and yet he did not have the training to understand many of the songs his machine captured as he ventured further from his native United States: 'When you have to sit through a half-hour song in Spanish that you can't understand [...] you need

something else to do.⁷² His archive's will-to-accumulation was spinning out of control. As he recollected in a lecture he gave in 1979 entitled 'From Lead Belly to Computerized Analysis of Folk Song': 'I just recorded – I figured myself as a sort of a suction pump. [...] But I didn't know what I was doing, really.'⁷³ As Shannon and Weaver discovered approximately around this time,⁷⁴ channels like Lomax and his machines are on a need-to-know basis, and they do not need to know.

Interestingly, Lomax's problem was not only one of comprehension. Although it seems to have subsided into the 1950s with technological advances including tape-recording, the LP, and stereo (all which he welcomed with open arms), a technologically induced frustration had become apparent during his time in Washington: 'We should be delighted to send you copies of everything you sang for us at once, but at the moment, we have no facilities for duplication of these records in the Library of Congress.'⁷⁵ Lomax sought to record all of the world's authentic voices and to feed those voices back to themselves; in the 1940s and into the 1950s, he hosted various programmes on CBS, Mutual, and then the BBC.⁷⁶ But his own analog storage and sorting systems at the Library of Congress were cumbersome and too delicate: 'The re-shelving of original records is becoming a very serious problem and I wish that you would make some arrangements about this soon to insure the originals against injury.'⁷⁷

In an influential 1945 article published in *The Atlantic*, titled 'As We May Think', Vannevar Bush describes a futuristic archive in which the modern troves of information and scholarship will be easily accessed, cross-referenced, and mapped.⁷⁸ Four years earlier, however, Lomax had already begun to dream of a virtual realm – a stack where the corporeality of the carriers was, if not erased, at least somehow better mobilized:

I hope that every note that is played in the United States during the next two decades, in war or in peace, in whore-houses or for Henry Ford rolls across the threshold of the music division, is catalogued, filed away in special self-liquidating cans which disappear until called for and demand constant attention from a staff of three-thousand in a building that old John's Blue Ox Babe could turn around in without scratching her tender arse.⁷⁹

Do folklorists dream of electric graphical user interfaces? Jonathan Sterne has explored how ethnographic phonography in the late nineteenth century was bound up with embalming practices and the Victorian cultures of death and remembrance.⁸⁰ Lomax, though, sought to reanimate the archive as an interactive and dynamic database (wherein 'special self-liquidating cans'

disappear until called for), one of the purposes of which would be to connect the holdings to the very folk that constitute their source. Not surprisingly, the utopian discourse around personal computing would later give him cause for excitement. As he wrote in a grant application for his multimedia software project: 'The Global Jukebox [...] is not just an encyclopedia of music, dance, and culture, but a *dynamic model* of the cultural universe which the user may explore, manipulate, and *expand*.'⁸¹ Before he could drag and drop self-liquidating cans, however, he needed to devise a system of sorting the data in his unwieldy analog archives.

The Cantometrics project, which officially commenced in 1961, seems to have functioned, in part, as a salve for Lomax's earlier archive fever. In it, he found 'something else to do', and he also found what would eventually become, with his Global Jukebox software in the 1990s, a way of potentially plugging life back into his sickly stacks of field recordings. If on his song-collecting journeys Lomax had occasionally found himself in the dark as a researcher, Cantometrics promised to be a sonar imaging device of sorts: 'Cantometrics was designed to facilitate quick [...] mapping of a musical terrain.'⁸² Employing anthropologists, ethnographers, statisticians, and a computer programmer (not to mention Columbia University's IBM 360 mainframe,⁸³ which was a crucial component of this interdisciplinary machine), the project attempted to study systematically the singing voice and its function within traditional societies. Lomax's team devised a set of coding categories that would allow them to comparatively study the world's folk music without actually looking at music or meaning as they had traditionally been conceived in studies of musicology and folklore: 'We came to focus more upon the shape than the content of the model, more upon the "how" than on the "what" of singing, since the "how" is the more constant element and thus, by definition, closer to the cultural core.'⁸⁴ Thus, at approximately the same time that Marshall McLuhan was trying to draw our attention away from the *content* of television and radio broadcasts, for instance, and toward media as such, so Lomax was moving toward the materiality of folk music to consider the aesthetics and social functioning of vocal channels themselves.

The Cantometrics coding process was a complex and time-consuming procedure; 37 categories were to be used, each with scales of varying ranges. A few of the qualities the team considered were the degree to which the singing group did or did not seem to have a leader; the degrees of rhythmic and tonal integration and organisation in the singing group; and the degrees of 'raspiness' and 'nasalization'.⁸⁵ The first meaning of 'Cantometrics' is the measurement of singing style, and so the project thus sought to rationalize and to attribute discrete (and quantitative) symbols

to the language-exceeding voices of the folk. Yet, the term 'Cantometrics' also pointed to the fact that singing style is a measure of social structure and solidarity. After coding the approximately 3500 songs that formed the basis of the Cantometrics data, and after correlating these results with data taken from George Peter Murdock's *Ethnographic Atlas*, Lomax and his colleague Victor Grauer concluded that singing styles were related to

1. Productive range
2. Political level
3. Level of stratification of class
4. Severity of sexual mores
5. Balance of dominance between male and female
6. Level of social cohesiveness⁸⁶

By looking at the characteristics of a society, Lomax thought, one can predict the kind of singing style that social structure would require. Conversely, by looking at singing style, one can also determine the kind of society a vocal style is helping to maintain.

But Lomax's will to analyse was not satisfied by his aural research alone. He also began to think about the ways in which the body, in addition to the voice, is also involved with the informational feedback of the cultures of the world. He launched a research project complementary to Cantometrics, entitled Choreometrics, which sought similarly to informationalize dance 'as a measure of society', as he put it in an essay co-written with Irmgard Bartenieff and Forrestine Paulay.⁸⁷ Inspired in part by Margaret Mead's suggestion to the American Anthropological Association in 1960 that her fellow scholars 'make more use of available data recording and storing devices',⁸⁸ and by Raymond Birwhistell's discovery 'that analogous patterns will be found at the same level in different communication systems',⁸⁹ Choreometrics sought to analyse and mobilize visual time-based media as a supplement to his work on sound recordings, the results of which could be cross-compared with the Cantometrics findings. Just as Cantometrics aimed to map and to dissect the voice, Choreometrics coding aimed at a radar representation of the moving body; coders were to make note of such particularities as 'most active body parts', 'body attitude', 'shape of transition', 'shape of main activity', and 'the energy of transition'.⁹⁰

Lomax's Cantometrics and Choreometrics projects clearly aspired to objectivity, and he often refers to the computer as a mere tool. For instance, he does not give the machine much credit when he acknowledges that 'the computer became the helpful servitor of this project'.⁹¹ However, just as

Lomax was reliant upon his prosthetic sound recorders on his field trips, the kind of information-processing he was interested in conducting with Cantometrics – cross-cultural factor analysis of the world's recorded voices – required the IBM 360. Lomax again found himself married to technology. As he put it in a televised interview with Robert Gardner,

The computer is buzzing with 500 variables, cross-correlated. And out of this are emerging enormous forms, which are complex enough to satisfy almost any cultural metaphysician. I swim in them all day long, and I must say I don't feel that I understand exactly how they work. One thing I am sure of, and that is that [...] man is basically a master aesthetician.⁹²

Lomax is not sure how the cross-correlated variables function, and yet he *swims* in them, fully immersed in his new network.⁹³ Dancer Forrestine Paulay collaborated with Lomax on Choreometrics, and she recalls the affective excitement Lomax expressed about his new partner's power: '[Lomax would] call me and he'd say "Look at this," you know, and I'd see this stream of numbers and patterns. [...] And he'd say, "Look what's happening here, look what this is showing!"'⁹⁴ A song-collecting version of 'Neo' in *The Matrix*, Lomax could finally perceive the data that had been surrounding him all along, songs and bodies (and not just melodies and ballads) raining down as information.

Yet, translation issues abounded. How best to let the folk speak to the researcher and to the mainframe, and vice versa? The parameters of the scales and categories, as Lomax himself acknowledges, were defined by the size of the IBM punch-card. So the bandwidth of the folk's voice was delimited by the structure of the computer's storage and processing media. But there were (human) eyes and ears that also needed consideration. The visual presentation of the coding sheet was thus designed so that it could facilitate interaction between these intertwined agents:

The number of levels was limited to thirty-seven by the size of the coding sheet, and the number of points on any line was limited by the thirteen punches available in a column on an IBM card. No more points were included on any line than we felt could be handled by an attentive listener. These thirty-seven lines, with 219 points, are set forth in a symbolic map on the right side of the coding sheet. The symbols, which are abbreviations for the distinctions made in each line, greatly facilitate learning and using the system. The listener records his judgments on the symbolic map and then transfers them to a number map on the left, which also serves as an IBM data sheet.⁹⁵

How can the scholar of folk music comprehend the vocal varieties of the world, on one hand, and harness the computational power of the digital computer? The coding sheet was offered as a relay joining the mind of the listener, the aural (analog) voices of humanity, and the digital processing power of the mainframe. (User-friendly symbols on the right, and digital translations on the left.)

Still, initiation into this network would take time and patience; *Cantometrics* came with six cassette tapes, the purpose of which was to make the listeners' ears compatible with the method established by the team.⁹⁶ Lomax guides potential Cantometricians through dozens of clips on these hours-long cassettes, teaching us how to rate the coding categories for various samples of recorded folk music. The training tapes (the experience of which is not unlike slowly installing software) seem to work as a kind of protocol, ensuring compatibility between the listener and the computational method: 'The Cantometrics tapes allow the listener to adjust to the world ranges of many audible features of singing, arranged in scalar form.'⁹⁷

Although human users of Cantometrics may have had trouble understanding the section of the coding sheet that was for the IBM 360 to 'understand', however, the computer itself apparently had trouble, too, with the demands of the project; it needed to be taught a new language. As the team's programmer Norman Berkowitz explains, 'To obviate the loss of time and programming effort that would be entailed in such preparation on a problem-by-problem basis, a special language, REDODATA, was developed, during the period November, 1965, to July, 1966, to facilitate the automatic and flexible redefinition and transgeneration of data.'⁹⁸ Only once everyone was on the same page (or punch-card) could the coding and information-processing of the world's archives of recorded folk music begin.

A Cybernetic Folk

So far we have seen how the IBM 360 structured the project and how the boundary-blurring network that included technology, folklorist, and folk interestingly recalibrated into Lomax's digital period. But the very object of his quest interestingly morphed, too, into the Cantometrics research. In his early writings, phonographic Lomax seemed content to bask in the mystical richness he perceived in the voices and bodies of the folk, which, again, '[escaped] the lines and spaces' of Western musical notation. Cantometrics attempted to harness the voice and the body and to make empirical sense of their variability on a social-scientific level. Lomax's understanding of

the materiality of traditional music, however, as the results began to pour in, became permeated by some of the language and concepts of the field of cybernetics, of which ‘the digital computer was an essential condition of possibility’.⁹⁹ Therefore, whereas the ‘truth’ of the sonic event had been complicatedly distributed along the sound-recording network within which he was working (from recording automata to the bell of the loudspeaker), here again the truth of the folk was to be found alongside the (now digital) machine.

The ideas of information, bandwidth, feedback, and homeostasis pervade the Cantometrics and Choreometrics research projects. Lomax believed that singing style is a fruitful field of study because it is a relatively *redundant* mode of communication (in other words, there are lots of repetitions). Lomax thus saw in the voice, vis-à-vis the disorienting swirl of images and sounds he perceived to be part of globalization, an effective noise filter. Once the team began to rate and to compare the voices that he and others had recorded with Murdock’s ethnographic data, they came to figure singing style as a feedback mechanism between a variety of social, economic, and environmental factors:

Each song style we have studied [...] portrays some level of human adaptation, some social style. Each performance is a symbolic re-enactment of crucial behavior patterns upon which the continuity of a culture hangs, and is thus endowed with the emotional authority of the necessary and the familiar.¹⁰⁰

The voice both expresses and reinforces particular social and environmental relationships, a component within a machinic circuit; it is the means through which a culture commands and controls *itself*. For instance, as Lomax writes of early modern Europe: ‘The bard was an early information specialist, storing the traditional knowledge of his group with the help of the redundant devices of poetry.’¹⁰¹ The particular conclusions of the Cantometrics project tended toward evolutionism; more ‘complex’ or ‘information-dense’ singing styles were found to belong to more highly stratified social systems. Yet, Lomax also wished to approach voice and society as a strictly relational system. Andrew Pickering has explored how some British cyberneticists regarded the brain as an adaptive, performative machine; rather than being understood as a receptacle for memories or ideas, the brain was an organ for acting.¹⁰² Lomax approached the voice with a similar lens. He had finally not just beheld but actually opened up his black box, and he saw that it was the homeostatic regulator of each of humanity’s diverse cultural systems.

The cybernetic notions of information, feedback, and homeostasis are also evident in the activist, tactical aspects of Lomax's work with digital media. Lomax perceived the explosion of mass media in the postwar era to be a culturally homogenizing force, a process figured as negentropic. As he writes in *Folk Song Style and Culture*:

The work was filled with a sense of urgency. To a folklorist the uprooting and destruction of traditional cultures and the consequent grey-out or disappearance of the human variety presents as serious a threat to the future happiness of mankind as poverty, overpopulation, and even war. Soon there will be nowhere to go and nothing worth staying at home for. [...] Meantime Telstar rises balefully on the western horizon.¹⁰³

Lomax grapples here with the contradictions of modern cultural imperialism. On one hand, there is a proliferation of communications; on the other, the informational possibilities of any given message seemed to him to be rapidly decreasing (a phenomenon he terms 'cultural grey-out'). His lament is not unlike Paul Virilio's in *Open Sky* or *The Information Bomb*, in which Virilio explores the erosion of situated horizons as a consequence of instantaneous telepresence and telecommunication: 'There lies the great globalitarian transformation, the transformation which extraverts localness – all localness – and which does not now deport persons, or entire populations, as in the past, but deports their living space, the place where they subsist economically.'¹⁰⁴ For Lomax, the noises of transnational industry and technology have increased to such a degree that it is no longer possible to recognize '[differences] which [make] a difference', which is how Gregory Bateson defines information.¹⁰⁵ 'There will be nowhere to go and nothing worth staying at home for', Lomax puts it.¹⁰⁶ The informational surplus of late capitalism appeared to be turning into a grey shade of goo, making information itself redundant.

And yet, in the rich diversity of traditional singing styles, now comparable thanks to the sheer power of the IBM, Lomax saw a beautifully wide range of bandwidth and informational possibility. The method of Cantometrics could be plugged into the voices of the world, he hoped, in an attempt to strengthen their functioning as relay:

Experience teaches that...direct feedback of genuine, uncensored native art to its roots acts upon a culture like water, sunlight, and fertilizer on a barren garden; it begins to bloom and grow again. The direction, planning, and administration of this cultural feedback system will be facilitated by the recognition of style structures and style differences.¹⁰⁷

The traditional voices of humanity were weakening, Lomax thought, in part because they often lacked access to mainstream channels of communication, and yet Cantometrics might serve as a meta-governor – a servomechanism through which we could regain control of our most essential informational circuits. Thus, Cantometrics should not only be for scholars of folklore. Lomax thought that schoolchildren and even ‘just plain folks’ can and should learn the method, and, in the process, better understand the singing styles that are foundational components of our cultural ecosystems.¹⁰⁸ Cantometrics and Choreometrics findings were thus disseminated not only through academic publications and papers, but also through presentations and a film series entitled *Rhythms of Earth*. ‘People are very stubborn about keeping these bodily matters going. I think the human race is going to resist this homogenization and build up new kinds of civilizations on these structures. That’s what this film is for’, as Lomax explained to Robert Gardner.¹⁰⁹

The realization of Lomax’s living database seemed to become most possible with the Global Jukebox, designed to run on an Apple Macintosh IICx.¹¹⁰ Lomax’s writing career had (slightly) slowed down by the late 1980s and 1990s, and so there is less material here to explicate, but the grant application, which Ronald D. Cohen has included in *Alan Lomax: Selected Writings*, and a video demonstration of the prototype promise an interactive and dynamic archive.¹¹¹ The multimedia interface would make it possible to place beside each other, in both visual and aural forms, all the findings of Cantometrics, and one could manipulate the data to explore new patterns. One would also be able to plug one’s own singing style into the database, making it not only a window into a static set of traditions, but also a collaborative, hybrid pump or regulator (though one not necessarily headed for homeostasis, it should be acknowledged, for the openness of system seemed to have a built-in threat towards the distinctions between ‘folk’ and ‘non-folk’).¹¹² The same networks that were eroding traditional cultures, then, might be put to good use in the global regeneration of the diversity of singing styles. Unfortunately for Lomax, however, and unfortunately for us all, the Global Jukebox technology never made it past the prototype stages in his lifetime.

Deep Digitality

Some have criticized the thread, across the history of digital culture, which posits digitization as a disembodiment or abstracting process.¹¹³

N. Katherine Hayles traces the notion that information can be divorced from its material carrier from cybernetics and information theory through to 1990s cyberculture and transhumanist rhetoric; contemporary images of humans uploading themselves to computers carry forward the humanist dream of disembodied consciousness, which Hayles finds influentially articulated in the work of Norbert Wiener.¹¹⁴ Utopian humanists are not the only ones who understand digitality as a condition in which the medium of the body is left behind; Mark B. Hansen critiques the anti-humanist (and decidedly dystopian) Friedrich Kittler on similar grounds.¹¹⁵ According to Kittler, the modern differentiation of technological media (into gramophone, film, and typewriter – a.k.a. the real, imaginary, and symbolic) is eventually subsumed by the monolithic phenomenon of digitization.¹¹⁶ According to Hansen, however, it is precisely Kittler's reliance on Claude Shannon's notion of information that leads him to an abstracted and disembodied understanding of the digital.¹¹⁷ Undergirding Hayles's and Hansen's critiques is the notion that there are other ways of conceiving of information and digitality. Hayles's book returns to less influential cybernetic theorists such as Donald Mackay, who offered an account of information that did not neglect the situated, embodied contexts in which information is necessarily received. Drawing on Gilles Deleuze and Henri Bergson, Hansen insists that digital code is always already framed by the '*in-formed*' users that engage with it: '[T]he *'image'* has itself become a process and, as such, has become irreducibly bound up with the activity of the body'.¹¹⁸ Whereas Kittler wants to remove the (human) senders and receivers from the digital communication model, Hansen wants to recognize the ways in which they thicken, stretch, and deepen the diagram.

There are dozens of ways one could critique Cantometrics as a social-scientific methodology.¹¹⁹ Most urgent, perhaps, in the context of the current discussion of cybernetics, is Lomax's flirtation with capture, command, and control. It is not a coincidence that one of the founders of the Human Genome Diversity Project, bent on informationalizing the substance of human being itself, expressed interest in the utility of Lomax's work.¹²⁰ Indeed, one cannot help but think of Cantometrics and Choreometrics when reading the Critical Art Ensemble's book *Flesh Machine*, a critique of the intricate subsumption of human bodies into the webs and networks of contemporary power: '[The flesh machine] has two primary mandates – to completely invade the flesh with vision and mapping technologies (initiating a programme of total body control from its wholistic, exterior configuration to its microscopic constellations), and to develop the political and economic frontiers of flesh products and services.'¹²¹ Lomax's projects indeed evince

an invasion of 'the folk', which he had formerly been content merely to perceive and to enjoy, a will-to-write and a will-to-measure the real itself.

Still, I submit that Alan Lomax's strange inventions and writings also constitute an attempt to grapple with an understanding of digital data that is not purely abstract or disembodied but is rather situated in particular, necessarily embodied horizons. Lomax was excited by the possibilities afforded by information processing; the ability of the machine to sort and map binary data was to be appreciated: 'It is exciting to realize that such a coherent and complete system, capable of accounting for world musical variation, was derived by a rigorous, mathematical procedure.'¹²² Yet, Lomax never seemed to discard his initial fascination with performance, which, for him, always seemed to exceed the notes, words, and more recently the digital bits that might be used to encode it. As he offered only a few pages after the above quotation: 'Music descends from the heavenly spheres of pure ideas and mathematics, where it was put by Pythagoras and Plato. Its performance framework clearly does not rest on mathematical abstractions, but is a human, a social thing.'¹²³ Lomax was sensitive to the possibilities engendered by computers, and yet his understanding of digital culture was palimpsestic – helpful binary code and embodied human life-worlds overlapping in an integrated mixed-reality network that I have been referring to as 'deep digitality':

You've got a theory of art [...] which is far more satisfying aesthetically, emotionally, intellectually [...] than any black/white thing of the sort that Levi-Strauss has foisted on us in the last twenty-five years, where everything is 'Yes or No.' [...] It's an enormously complicated web; it took the biggest computer in the world to make these comparisons—the whole of the mainframe was occupied with it for two days to get this map, because here you're comparing the actual process of interaction between people. [...] Man is essentially an aesthetic animal—we're not a computer that goes 'Yes/No Yes/No Yes/No,' with a tree diagram making sense out of what we do. Our brains and our nervous systems connect us with every *body* around us. We carry these very complex social and communications systems with us. [...] It is an enormously complex interconnected network.¹²⁴

Lomax, the post-structuralist folklorist, finds us constrained by Claude Levi-Strauss' binary thinking. Rather, paralleling Gilles Deleuze and Félix Guattari – for whom '[t]he life of the nomad is the intermezzo' – Lomax envisions an affective and distributed folk, a web that stretches across several

strata, including nervous systems, 'the biggest computer in the world' and 'every body around us'.¹²⁵ Of course, the rhetoric of disembodied cyberspace has all but completely died out by now,¹²⁶ but Lomax was on the cutting edge of mixed reality, trying as he did to envision a digital convergence that did not erode previous media (including the body) but rather rejuvenated them by descending, deep, to the cultural core of our sung environments. So at around the same time that, for example, MIT's Nicholas Negroponte was touting the majesty of 'weightless' bits, *disembodied* digital information that would revolutionize economy, society, and culture,¹²⁷ Lomax was listening for a utopia wherein digital networks are always already plugged into our fleshy voices, which richly and complexly embrace, but shall not be reduced to, code.

Echoes

We are in the Ozarks, listening to a lonesome twanging voice belt out 'Bury Me Beneath the Willow', a plaintive and desperate tune of heartbreak and defeat. Before it is over, we are off to Jackson, Mississippi, now in a car with Lomax and an unnamed hitchhiker speeding to an unknown destination. Shirley Collins is also present, according to the metadata, though she cannot be heard, nor can the car, really, but we do get a sense of other locomotors; the hitchhiking southerner talks about the 'eleven commandments', white supremacy, and angels:

'These angels [...]' [prompts Lomax].

'They disappeared, you see.'

'Why did they disappear?'

'Well, God had that done, you see.'¹²⁸

Lomax indulges the white supremacist and his dreams of winged messengers of God as though he were asking his informant why he built his house out of wood or why he uses a particular kind of surface material as a drum skin. Lomax the Inscraper of Cultures tries not to judge but only to document, like a good phonograph. It is through his sacrifices and abstentions that we are now able to receive, through screens and tinny laptop speakers.

Tiring of the Southerner's ramblings, we move on. First to Saint Simons Island, where we are treated to a stirring group sing and clap-along of 'Down by the Riverside', starting slow but speeding up, a strong leader guiding the participants into each refrain. Before the climax, we are yanked over to

Paris, where ‘Big’ Bill Broonzy sings in a hotel room about getting the blues when it rains; it is as though we are right beside Broonzy, maybe sitting on the bed or a chair (maybe it is raining now). Now down to Morocco for ‘Glaoua Dance Song’, which sounds much farther away in comparison, as though Lomax had sought a vantage point from which he could take in the entire setting, not only the voices. We are in an environment, which includes people. Now we get up and dance, if we want, in Norfolk, Virginia, where the gospel group Peerless Four takes us through a scandalously sexy rendition of ‘Jesus On the Mainline’. Exhausted, we rest.¹²⁹

The journey described above was made possible by the Lomax Geo Archive, popularly understood as a descendent of Lomax’s still-imaginary network, The Global Jukebox. NPR put it thusly:

Folklorist Alan Lomax spent his career documenting folk music traditions from around the world. Now thousands of the songs and interviews he recorded are available for free online, many for the first time. It’s part of what Lomax envisioned for the collection—long before the age of the Internet.¹³⁰

As we have seen, Lomax was indeed concerned with accessibility and interactivity both long before the World Wide Web and even the Internet, and the Lomax Geo Archive allows us to retrace the song collector’s steps by merely pointing, clicking, and listening – no dusty stacks or fragile discs required.

The Lomax Geo Archive is an incredible resource and great fun to explore, but it is worth noting just how far from the utopian reverberations in Lomax’s writings, wherein he grapples both with computational power and the corporeality of information, this digital database has landed. As Jason Farman argues, the participatory aspect of Google Earth ‘functions to trouble’ the imperial gaze of cartography: ‘By integrating a social network with GIS technology, the authorial nature of the map can be brought into public debate and reconfigured by the user-generated content created by the community.’¹³¹ However, participation, though a possible function for Google Earth users, is absent from the Lomax Geo Archive, although it harnesses the engine of Google Earth. The experience is remarkably cold, as though the world’s folk music has been laid out on a table for dissection. There is no feedback: you can log your journey, and share links, and that is all. The poetic power of Lomax’s imaginary media creations seems to have evaporated like unrecorded sound.

There is an interesting development on the way, however. The Association for Cultural Equity is currently developing The Global Jukebox Song Tree, which carries forward Lomax’s peculiarly embodied cartographic models.

A prototype has not been released yet, so a deliciously boastful teaser video will need to suffice for now:

This taxonomy gives us two things: first, a kind of musical family tree, or song tree, that shows relationships in and among its many branches; and secondly, a new kind of map, one based not on political or geographic boundaries, but musical affinities. Here the tree is presented as a set of concentric rings radiating from a globe. The inner ring shows the fourteen regions of song style, the second ring areas, and the outer ring provinces, positioned and coloured to show relationships. Selecting a province from the outer ring opens a list of cultures within a province. Selecting a culture from the list loads the song samples from that culture, which we can now listen to. This view is primarily about the taxonomy, with a hint of geography presented in the central globe. But we can also show the same information directly on a map. Let's explore that. Here we see a world map, with circles representing the province level of the taxonomy. Provinces are coloured according to their region and area, and sized based on how many cultures are sampled within. When we select a province, it opens to reveal those cultures, which in turn are sized by the number of song samples for that culture in the database. As with the view before, we can now select music from the culture to listen to. We can zoom out of the map and use this menu to highlight taxonomy levels related to the last selection. It lets us see, for example, the global influence of African music, especially in areas like the Caribbean. And this only scratches the surface of what is possible. Underlying the map and tree is the musical DNA mentioned earlier. Each song has its own unique coding. Right now work is underway to create the kinds of analysis tools that helped Lomax develop his taxonomy, and much more. These tools will allow people to do things like colour the map according to particular song traits. Imagine seeing all the songs around the world in a particular vocal style, or way of organizing the performance group.¹³²

In the accompanying fly-through video, our eyes are pulled across divergent modelizations of bodies and continents: a sliding, sectioned wheel surrounds the planet, including data that Lomax himself had interpreted and thus constructed, but also reaching down to real voices and up to an imperial cartographic gaze. Lomax's scientific impulse lingers (the tree purports to map genealogies of singers), but so too does his weird magic, for there is clearly a compatibility issue. Where does knowledge begin and the folklorist end?

Meanwhile, tactical media practitioners and curators carry forward, perhaps unknowingly, Lomax's dreams of a dynamic archive. Taking their cue from McKenzie Wark's warning that '[t]here's a job to do to make sure that it leaves something behind, in the archive, embedded in institutions, for those who come after',¹³³ David Garcia and Eric Kluitenberg have theorized a 'Living Archive', a distinctly tactical and perhaps medium-specific variant of the generally sedentary sites of modern knowledge storage:

Our ideal has been to be able to construct a 'living archive for tactical media', a task we have as yet not achieved and one we may never be able to fully live up to. With the notion of a 'Living Archive' we aim to create a model in which documentation of living cultural processes, archived materials, ephemera, and discursive practices are interwoven drawing on the possibilities opened up by open source on-line database and content management systems, and digital audio and video technologies.¹³⁴

Like Lomax's Global Jukebox, the Tactical Media Archive envisioned here is both object and subject, both storage receptacle and amplifying transmitter, 'because it participates actively in what it documents'.¹³⁵ Garcia and Kluitenberg's essay itself was published on the mobile archive The Tactical Media Files, an interactive and useful preservation project for this now 20-year-long scene, to which anyone can contribute.

Though the curators and theorists of the Tactical Media Files seem much aligned with Lomax's digital dreams, however, one wonders again if there is something yet to be translated from Lomax's imaginary machine. 'The whole database allows the scientist, the layman, and the student to explore, experience, and manipulate the broad universe of culture and creativity in a systematic fashion, with audio-visual illustrations at every turn of the road', as Lomax describes his promising database in a grant proposal.¹³⁶ Why would the scientist, the layman, or the student spend time and energy on this machine? For Lomax, this was a no-brainer, for the 'living archive' of the folk begins where we are: 'The appealing content of the Global Jukebox, which includes contemporary pop song and dance, attracts students to serious study and to exploration of their surroundings'.¹³⁷ This leads to an important question of aesthetics and of taste. Will Tactical Media break out of its avant-garde positionality, to go where folk songs go, which is both into the air and into our selves?

2. Pete Seeger's Time-Biased Tactics¹

'Our general theory is to throw as many songs as we are possibly able to do out into the public air, so to speak, and let the people choose which they think are good and which they think are bad. Which method can you think of that would be more democratic than that?'

Pete Seeger²

Introduction

Pete Seeger, who performed as a young man with Woody Guthrie in the Almanac Singers, and who would go on to a long career as a singer, songwriter, journalist, activist, and general 'elder statesman' of the folk field, might seem to be an excellent example of the genre's nostalgic approach to communication. Seeger, for instance, is the one who allegedly exclaimed his desire to chop Bob Dylan's microphone cord on the evening in Newport in 1965 when the younger songwriter traded in his acoustic guitar for an electric Fender Stratocaster. If we believe Seeger's retrospective claim that his only problem was that the sound was poorly mixed during the set, and that Dylan's masterful lyrics did not come through, we can recognize a fear of one of rock music's characteristic messages, noise.³ Seeger's gesture has often evoked a fear of mediation and a desire for face-to-face communion. This apparent longing for transparency found its way into Seeger's own writings as well. The song 'The Ballad of Old Monroe', for instance, puts forward a critique of mass media as ideological apparatuses that might be remedied by the veracity of face-to-face communication: 'The papers and the TV never told a story straight / So listen now, I will to you the honest facts relate'.⁴ Seeger often idealized the possibility of communicating outside mass-media channels, ironically often using media such as LPs to do so.⁵ In one of his most fascinating columns for *Sing Out!*, he even takes aim at Marshall McLuhan directly: 'If any McLuhanites are listening, I challenge them to let me visit their mailbox every morning for a month, and remove the contents of all their letters, presenting them only with the empty envelopes. The envelope is not the message. Just a part of it.'⁶

Yet, Seeger's understanding of communication is more complicated than his paradoxical and apparently naïve contempt for mass media, and media in general, would suggest. Benjamin Filene's *Romancing the Folk* concludes with a chapter on Dylan and Seeger, pointing out the similarities

across their respective bodies of work. Filene highlights the pragmatism and performativity of Seeger's understanding of folk authenticity, and thus implicitly urges us to reconsider the alleged nostalgia of his thought: 'To Seeger, folk music was not a collection of old songs but a process by which new ones were assembled. In theory, at least, any genre of music could become "folk."' ⁷ Ronald Cohen has also reconsidered the relationships between pop, commercialism, and authenticity in the folk revival, and due attention is paid to Seeger's role. ⁸ This chapter will attempt to take a closer look at Seeger's work as an author, broadcaster, and songwriter, focusing in particular on Seeger's understanding of *media*, which has not yet been done in detail. First, I will consider how, despite his impatient critique of McLuhan, Seeger himself had a working 'medium theory' insofar as he was conscious of the distinctive structuring capacities of what McLuhan called 'hot' and 'cool' media. ⁹ Second, and drawing here on John Durham Peters, I will consider the possibility that even when Seeger discusses 'live' or 'un-mass-mediated' performances (the so-called folk process), he clearly envisions a broadcasting model of dissemination. Ideal folk communication for Seeger involves not the dialogic melding of souls, but the casting of seeds. Seeger's thoughts on 'cultural warfare', then, also warrant comparison to the field of tactical media, of which Seeger might be seen as a progenitor. Anticipating the nomadism of tactical media theory, Seeger envisions a form of mediatized resistance in which movement, flow, heterogeneity, and speed are essential qualities. Yet, whereas tactical media theory has tended to articulate a flatly postmodern sense of an eternal present, Seeger offers an interesting synthesis of both spatial and temporal concerns.

Pragmatic Medium Specificity

Before looking at Seeger, we will recall a central feature of medium theory. Harold Adams Innis explores what he terms 'space-' and 'time-biased' media across the history of Western civilization, from Ancient Sumeria to the contemporary United States. ¹⁰ According to Innis, the degree to which a medium is either durable but immobile, on one hand, or easily transportable but ephemeral, on the other, has far-reaching effects on the cultures and societies in which it is deployed. ¹¹ 'Time-biased' media such as pyramids or clay tablets foster tradition and decentralization; the adoption of 'space-biased' media, however, has tended to have disruptive effects on time-biased 'monopolies of knowledge', and has rather made possible the emergence of markets, industry, and secularization. ¹² Thus,

an analysis of both political and economic power requires a consideration of the specific material systems of communication that ground a given social assemblage:

Large-scale political organizations such as empires must be considered from the standpoint of two dimensions, those of space and time, and persist by overcoming the bias of media which over-emphasize either dimension. They have tended to flourish under conditions in which civilization reflects the influence of more than one medium and in which the bias of one medium towards decentralization is offset by the bias of another medium towards centralization.¹³

It was partly the introduction of print, then, that ended the monopoly of the church and led to the Reformation of the fifteenth and sixteenth centuries.¹⁴

McLuhan's work on media takes up Innis's concern with materiality and medium specificity. McLuhan's famous claim that 'the medium is the message' urges us to look, not only at the content or information of a communicative situation, but also at the particular channels grounding it.¹⁵ Yet, McLuhan sets aside Innis's time/space heuristic for his own 'hot' and 'cool' categories. Hot media such as print and radio are characterized by high definition and by the passive mode of reception they therefore require, and they tend to work on distinct senses (e.g. print on the eye, radio on the ear); cool media, on the other hand, are participatory, and they tend to involve all of the senses simultaneously.¹⁶ Although print had all but eroded any trace of oral consciousness in the West, McLuhan believed that the postwar electronic ecology – the television-fostered 'global village' – offered a potential return to a cool, interactive culture.¹⁷ Despite their differences in emphasis, however, McLuhan and Innis see particular media hybrids as crucial agents in various forms of struggle. Just as print challenged the hegemony of the *ancien régime* according to Innis, television and rock music – the media of the 1960s counterculture – were perceived by McLuhan (and by many who read him) to be threats to the hegemony of modern bureaucratic and industrial culture.¹⁸

Seeger was not an academic, and he never offers as systematic a vision of historical change as either Innis or McLuhan. Still, despite his rejection of 'The McLuhanites', Seeger's essays and aphorisms for *Sing Out!*, *Broadside*, and other publications ruminated on the question of media, and his understanding of medium specificity was central to his thoughts on tactical media warfare. First, he often points out the particularities of print, often considering the medium's limitations:

A song is ever moving and changing. A folk song in a book is like a picture of a bird in mid-flight printed in a bird book. The bird was moving before the picture was taken, and continued flying afterward. It is valuable for a scientific record to know when and where the picture was taken, but no one is so foolish as to think that the picture is the bird.¹⁹

Like many of his predecessors and contemporaries in American folklore, and like medium theorists too, Seeger sometimes privileges embodied, experiential speech over abstracting and alienating print.²⁰ The folk process is fluid and variable, and the flux of the folk stream cannot be wholly captured by mere signifiers: “Think of folk music as a process; then the history of any folk song will show continual change, contradictions, action and interaction of opposing influences. Now, this might be called, in the term of my mother-in-law (a wonderful woman), diabolical materialism.”²¹ The community of singers and participants called into being by the act of folk singing involves not just the passive exchange of narratives or words, for there are affective registers to the folk process that printed texts can never quite capture: “Words, words, words. Sometimes the most eloquent song I can sing is “Wimoweh”, with no words at all. Just melody, rhythm, and a great bass harmony.”²²

Despite his fascination with the murky material below ‘words, words, words’, Seeger acknowledged that a hybrid relationship between print and folk song could prove fruitful. He spearheaded *People’s Songs Bulletin* in the late 1940s, the mimeographed publication that would eventually become *Sing Out!*²³ Actually, his first calling as a teenager was to the field of journalism, which perhaps explains his penchant for topical songs. His experience of briefly working at the Library of Congress under Alan Lomax in the late 1930s (his job was to listen to the volumes of recordings of folk music that Lomax himself did not have time for), and the influence of his father (the folk-loving and left-wing composer and musicologist Charles Seeger), seem to have broadened his media horizons beyond print.²⁴ However, Seeger was sensitive to both the limitations and possibilities of chirographic and print culture, and he recognized that distinct media – including multimedia networks, which he seems to anticipate in the following quotation – might have distinct roles to play in his project of prodding the whole world to sing together:

The printed page is a handy device, and there is value in being able to count on a certain number of pages appearing regularly with up-to-date information on a certain subject. ... The basic idea would be better if we could afford to include a phonograph record with every issue. Or a roll of video tape you could play through your TV set. But this will come in time.²⁵

Although Seeger's experience with mass-media institutions often led him pragmatically to privilege speech and singing, he grasped the position of these media in a hybrid and dynamic ecology, which, as we will see below, one can come to harness or wield like a weapon.

Seeger has been given much attention for having exclaimed that he wished he had an axe with which to cut Bob Dylan's microphone cable at Newport in 1965 during the young star's famously 'plugged in' set.²⁶ Seeger's gesture, however, was not about purity, but about pragmatics. As he has repeated on numerous occasions, his problem was not the channel per se, but its particular configuration:

It was at Newport, 1965. I couldn't understand the words. I wanted to hear the words. It was a great song, 'Maggie's Farm', and the sound was distorted. I ran over to the guy at the controls and shouted, 'Fix the sound so you can hear the words'. He hollered back, 'This is the way they want it'. I said 'Damn it, if I had an axe, I'd cut the cable right now'. But I was at fault. I was the MC, and I could have said to the part of the crowd that booed Bob, 'you didn't boo Howlin' Wolf yesterday. He was electric!' Though I still prefer to hear Dylan acoustic, some of his electric songs are absolutely great. Electric music is the vernacular of the second half of the twentieth century, to use my father's old term.²⁷

Another explanation, offered in a letter from Seeger to Joe Boyd in 1986, complicates the picture by mapping the standoff in terms of media diagrammatics: the 'main problem with amplification' is that it '[tends] to discourage the ordinary average person who just likes to sing a song into thinking that they can't sing without it'.²⁸ This frames the gesture in terms of participation and accessibility. Whatever his exact motivation in that much-mythologized moment, Seeger was not against electric instruments per se:

Nowadays the [loud]speaker gives out more twang. But even so, I don't think the range of tone, or the flexibility, can beat a good acoustic guitar. And all that equipment to lug around! Ugg. Of course, me, I've been playing electrified music for a long time. Ever since I started using microphones.²⁹

Seeger preferred acoustic guitars and banjos not because he wished to be 'behind the times' like the pastoral folk. Heavy electric gear is simply not *fast* enough. A DIY techno-nomad, Seeger was willing to take up any tool (acoustic guitars, television programmes, axes, etc.) fit for the task at hand

and the situation. The hybrid assemblages called ‘songs’ were his favourite, but only because they were able to cross so many channels and territories at such high velocity: ‘Songs can go places and do things and cross borders which people cannot.’³⁰

Seeger’s pragmatic medium specificity, his willingness to proceed ‘by any media necessary’, is pithily articulated in one of Seeger’s most well-known compositions, ‘If I Had A Hammer (The Hammer Song)’, co-written with Lee Hays. ‘If I had a hammer, I’d hammer in the morning. / I’d hammer it in the evening, all over this land’, Seeger sings.³¹ But there are other tools with which one can transmit particular effects: ‘If I had a bell, I’d ring it in the morning’; ‘If I had a song, I’d sing it in the morning’.³² Each of these distinct channels is used to transmit ‘love between my brothers and my sisters’, and thus the song’s emphasis is also on content. Yet, the verses revel in the particularity of the makeshift weapons and in translation itself. The song revels in the specificity and materiality of particular acts of mediatised resistance. (One can understand why WikiLeaks named ‘If I Had a Hammer’ their ‘WikiLeaks Song’.) One sings songs, one swings hammers, and ‘to every thing [...] there is a season’, as he puts it elsewhere.

Performance and Television

As we have already begun to see, Seeger’s medium specificity is more complicated than the simple distinction between print and speech, a distinction that has been drawn many times across the histories of ethnography and American folklore.³³ For Seeger, even ‘live’ performance is inflected by the channel; gesture and self-presentational style, but also the architecture of the performance space (or the format of documentation technology), are interrelated agents in the total communicative event of folk singing. For instance, in 1960, he explores the features that would set the strongest folk festivals apart:

Set up a 50-foot stage, and have 5,000 or more seated in front of it eagerly looking forward to a show—I mean a Show—and you might as well realize that a lot of America’s truest folk performers could not appear successfully. From beyond the tenth row no one would see the twinkle in the old ballad singer’s eye, nor the grace of gnarled fingers on the fiddle strings. So who has to take over the show—I mean, Show? The seasoned performer, who with gestures and broad smiles and stage experience can project to the back rows.³⁴

Seeger ponders the ways in which particular media of assembly make possible varying engagements with both music and the body politic. Recalling Jean-Jacques Rousseau's critique of the eighteenth-century stage and Paris, its breeding ground, Seeger is contemptuous of the ways in which performers in 'Shows' are able to externalize their symbolic expressions, for 'gestures' and 'broad smiles' are abstractable and repeatable *signs*.³⁵ 'The twinkle in the old ballad singer's eye', on the other hand, is not something that can be standardized, manipulated, or externalized. It is a causal index of authentic self-presence.

Of course, many contemporary scholars of culture and media will find Seeger's faith in sincerity problematic, for even vocalizations are signifiers.³⁶ As Erving Goffman and Judith Butler have taught us, all behaviour and even identity is a performative or discursive construction.³⁷ Still, the point is that Seeger struggles here with the possibility that distinct media foster distinct kinds of aesthetic and political communities. Some modalities of communication (e.g. dissent) are not well channeled by the bourgeois concert auditorium. Indeed, there are forms of expression that such an auditorium simply cannot transmit. Thus, a 'good' folk festival does not only feature a certain repertoire (which concerns the level of content), but it must also be concerned with the technologies that conjoin the music to the audience and thus the audience to itself. Seeger thus recognizes that the transmission subversion and dissent is necessarily marked and corralled by the media ecologies in which such projects take place.

Given his interest in the minutia of performance, the twinkling eyes and gnarled hands of folk singers, and their intersection with various other architectural media, it is perhaps not surprising that Seeger was also sensitive to the question of how different performance styles might be better suited than others to television broadcasts, a question McLuhan would also explore. Beginning from the ontology of the medium, McLuhan claims that 'hot' performances do not translate well into televisual images: 'TV is a medium that rejects the sharp personality and favors the presentation of processes rather than of products'.³⁸ On these grounds, he suggests that John F. Kennedy was able to beat Richard Nixon in the presidential race because the former's performative mannerisms were more compatible with the cool, participatory televisual image.³⁹

Seeger was severely critical of existing television broadcasting in the 1950s and 1960s. *Contra* McLuhan, for Seeger the turn to participation and DIY culture expressed by the folk revival (and by the counterculture it helped spawn) was a *response to*, rather than a product of, the new medium: 'The revival of interest in all folk music, which proceeds this year of '56 on an

unprecedented scale, is simply part and parcel of a gigantic counter-trend in American life (the main trend is, of course, mass production and mass media)'.⁴⁰ His own experiences as a potential (but often censored) televisual performer could only have further fuelled his contempt. Even when he was finally allowed on the *Smothers Brothers Comedy Hour* in 1967, for instance, which ended a seventeen-year blacklisting for his involvement with the Communist Party and for his unwillingness to participate in the House Un-American Activities Committee (HUAC) hearings (yet not invoke the fifth amendment), his performance of 'Waste Deep in the Big Muddy' was controversially cut before the programme made it to air: the clear allegory and critique of the Vietnam War was too controversial for the CBS censors, though subsequent press coverage of this censorship would eventually urge CBS to invite Seeger back on the programme to perform the song.⁴¹

Nonetheless, there are glimmers of hope in his writings, even in the mid 1950s, that the aesthetic potentials of television would one day be explored: 'For the TV cameras can move in close, and can give you the twinkle in the old ballad singer's eye'.⁴² Seeger believed that television was saturated with possibility: 'TV is the greatest medium. [...] It's a goddamned shame that nobody is presenting it right'.⁴³ The dynamic and embodied folk process, though not quite documentable by the printed page (though pages have their own uses), is well suited to television, if only the political-economic structures governing the medium could be disrupted. Yet, this disruption could happen *from inside*: minor and counter-hegemonic forms of knowledge and communication could be amplified and distributed by this new medium despite the constrictions of its institutional and political contexts.

These aesthetic and political observations were put to work in Seeger's own television programme, *Rainbow Quest*, which began to air in 1967 on a handful of public television stations across the country.⁴⁴ A stark minimalism, videographic slowness (only two cameras sluggishly capture the action), and a seemingly improvisatory conversation style are perhaps the series' most distinctive features. In the average episode, Seeger strums a few tunes by a kitchen table on an otherwise bare set, then brings out a guest or two with whom he then swaps songs and stories in seeming absence of a script or even plan (guests included stars such as Johnny Cash, Richard and Mimi Fariña, and Judy Collins, but also older and less well-known singers such as Mississippi John Hurt, Roscoe Holcomb, and Reverend Gary Davis). Even in contrast to other 'cool' countercultural talk shows of the time, such as *The Dick Cavett Show*, *Rainbow Quest* is marked by a deliberate anti-professionalism; the programme is a willfully amateurish affront to spectacular culture via the spectacle's own channel of choice.⁴⁵ McLuhan,

who claimed that TV transmitted processes, not products, would have approved, if the transmissions had made it to him in Toronto.

Ironically, the folk revival's mainstream television debut had come a few years earlier via a programme called *Hootenanny* (ABC, 1963–1964), which took its name from the rent parties held by the Almanac Singers in Greenwich Village in the 1940s, which Seeger himself had helped to plan and at which he performed. At the original 'Hootenannies', distinctions between performer and audience (and perhaps between self and other) had been playfully and politically effaced (see chapter 5 below), but ABC's *Hootenanny* was a fast-paced 'Show'. Hosted by the lugubrious and handsome Art Linklater, the programme consisted of a light montage of images of pleasant college life mixed with quaint folk and country standards. Massive college auditoriums were filled with enthusiastic young fans, here spectators only, aside from the occasional sing-along. Performers did not have time to speak or to engage the host (or the crowd) in discussion. One performer even drew attention to the hot rigidity of this performative situation: 'Hey, hey, if you guys keep clapping, they're going to cut me short', said Hoyt Axton, as he quickly moved on to his next song.⁴⁶

Hootenanny was denounced across the pages of *Singout!* and *Broadside* by critics who felt that the programme misrepresented the spirit of the revival. Seeger described it recently as 'a half an hour of kids clapping, fun and games'.⁴⁷ *Rainbow Quest*, on the other hand, though the show largely stuck to music and did not often deal with overtly political topics, can be read as a medium-specific affront to 'hot' culture:

June Carter and Johnny Cash, they've been touring around the world, they just got back from overseas, they have a whole big show. Normally, it's a little unfair to ask them to perform without their whole show here, because it's a wonderful show, but I asked them if they'd come around just the two of them, so we could get a chance to talk a little, and if we kind of improvise our way through a program, I think maybe you'll get to know them better; it won't be an act or anything like that.⁴⁸

Sometimes the pace of the obviously unrehearsed programme would grind to a halt, with Seeger taking almost painfully long pauses to think, and often clumsily leading the guest through the repertoire. In this way, Seeger demonstrates an adventurous exploration and negotiation of media hybridization. An articulation of the kind of info-war McLuhan called 'counterblasting', *Rainbow Quest* was a relatively DIY attempt to cool down the wasteland.⁴⁹

Folk Singing as Dissemination

So far, we have seen how, despite his impatient critique of ‘McLuhanism’, Seeger himself brought a material sensitivity to the various channels at his disposal as a folk singer and activist, and we have also considered how his pragmatic medium specificity inflected his work as a television programmer. Yet, even when he discusses the folk process (often held to be a ‘live’ or face-to-face communicative act), he clearly has in mind a broadcasting model of communication. The dream of a face-to-face public sphere, in which rational citizens engage in dialogue, is not to be found in Seeger’s musings on media.⁵⁰ Rather, we see a field of cross-firing projectiles, pragmatically mobilized channels whose function is the scattering of signals.⁵¹

Seeger’s theory of dissemination is worth thinking about, because many medium theorists have privileged presence, immediacy, and orality in various ways.⁵² Innis’s essay ‘A Plea for Time’ suggests that a return to the dialogic forms of Ancient Greece is just what the space-biased contemporary media ecology requires, if flexible democracy is to be achieved once again.⁵³ The ephemerality of cheap newsprint, radio, and other forms of popular culture have led to the forgetting of tradition and time, and Innis thought that a rejuvenation of oral dialogue might remedy this state of affairs.⁵⁴ Similarly, McLuhan’s ‘global village’ described the contemporary return to orality and sensory integration that he believed ‘cool’ electronic media were fostering.⁵⁵ McLuhan’s student Walter J. Ong makes similar judgments about technology and the word; sound recording and televisual broadcasts promise a ‘secondary orality’, not quite as integral as the first, but nonetheless closer to the human condition than modern, alienating print culture had been.⁵⁶

Of course, the idea that the voice is a more integral or natural channel of communication has been critiqued from numerous angles. Jacques Derrida famously deconstructed the *logophonocentrism* privileged over the history of Western philosophy by exploring how the ‘present’ voice was always already contaminated by the writing it had tried to exclude.⁵⁷ Post-structuralists such as Roland Barthes, Michel Foucault, and Jean Baudrillard all worked over similar ground: nothing exceeds the ideological processes of signification – power is everywhere – the map is the territory.⁵⁸ Recent scholarship in performance and sound studies has offered more historically grounded variations on these arguments.⁵⁹ Jonathan Sterne, for instance, takes on Innis and McLuhan in particular for their essentialist understandings of sound and hearing.⁶⁰

John Durham Peters's *Speaking into the Air* comes at the issue from a different angle. Peters reconsiders not orality or literacy as such, but rather the ethical frameworks that have tended to get mapped onto these models of media. Peters begins by contrasting Plato's critique of writing with Jesus's endorsement of dissemination; Socrates in Plato's dialogue *Phaedrus* articulates a sender-oriented defense of dialogue, whereas Jesus in the Gospels promotes a broadcasting ideal of communication, which gives more attention to the act of reception: 'The sower engages in a purely one-way act: no cultivation of the fledgling plants occurs, no give-and-take, no instruction as to intended meaning.'⁶¹ Once the seeds have been scattered, the disseminator has little control over which take root and which do not. Peters is not claiming that we should do away with dialogue or with the dream of dialogic transparency. Still, the notion of communication as transparent or oral/aural communion can be just as violent and oppressive as it can be democratic: 'Dissemination is far friendlier to the weirdly diverse practices we signifying animals engage in and to our bumbling attempts to meet others with some fairness and kindness.'⁶² Although cultural criticism and media scholarship over the 20th century has often lamented the effects of mass-media broadcasting, Peters finds redemptive potential in the point-to-multipoint diagram: 'The practice of the sower is wasteful. He lets the seeds fall where they may, not knowing in advance who will be receptive ground, leaving the crucial matter of choice and interpretation to the hearer, not the master.'⁶³

Despite his fascinating anticipation of McLuhan's thought, Seeger's medium theory values not intimate communion (the 'cool' dialogue promised by the 'global village'), but relatively anonymous *dissemination*. He seems to have picked up the idea of folk singing as broadcasting from Woody Guthrie, entirely appropriate given that it is not a theory of innovation, but rather of collaborative diffusion: 'Since [Woody] frankly agreed that he couldn't tell which of his songs would be good and which would soon be forgotten, he adopted a kind of scatteration technique – that is, he'd write a lot of songs, on the theory that at least some of them would be good.'⁶⁴ The act of folk singing is figured as the spraying of a stream, and the folk singer does not search for face-to-face recognition but rather wanders the earth spreading the seeds of the folk. Which seeds are 'folk', and which not, is not for the broadcaster to determine. Like a radio or television station's transmitter, the folk singer is necessarily without knowledge of which of her seeds will bear produce: 'Time will sift the good from the bad. And perhaps centuries from now, when we are all crumbled to dust, some child in a world which has long since proceeded to tackle other problems besides how to

ban the Bomb will be singing a verse which you tossed off in a moment of inspiration.’⁶⁵ As in Peters’s reading of Jesus as represented in the Gospels, Seeger does not mind if some signals are spilled, or if others decay, as they necessarily are when radio and television stations transmit across the ether, because he recognizes the autonomy of the receivers and their ability, indeed their need, to tackle the songs from within their own horizons of experience. In a recent documentary, Seeger even directly invokes the parable of the sower: ‘I look upon myself as a planter of seeds. And, like in the Bible, some of them land in the stones and they don’t sprout, some land in the pathway and get stomped on, but some lay on good ground and grow and multiply a thousand-fold.’⁶⁶ Whereas Peters takes his cue from Jesus, Seeger interestingly takes his from the American folk hero Johnny Appleseed, after whom Seeger would name his *Sing Out!* column. In his first column, he makes it clear that the act of planting and spreading seeds is what attracts him to Appleseed’s mythology: ‘This column is dedicated to Johnny Appleseed Jrs. – the thousands of boys and girls who today are using their guitars and their songs to plant the seeds of a better tomorrow [...]’.⁶⁷

We can consider Seeger’s vision of folk singing as a complex ‘remediation’ of broadcast television, radio, and even print.⁶⁸ Jay Bolter and Richard Grusin have explored the ways in which historical media change involves a ‘double logic’.⁶⁹ As media evolve and borrow from past forms and genres, new media either tend to borrow from other media in order to efface the process of mediation or else to emphasize it; ‘remediation’ tends towards either immediacy or ‘hypermediacy’.⁷⁰ An example of a newer medium borrowing from an older one in order to create an effect of immediacy is television’s incorporation of theatre’s and radio’s ontologies of ‘liveness’.⁷¹ And yet, media do not move forward through time in a uniform manner, Bolter and Grusin argue: ‘old’ media also become repositioned within the wider ecology.⁷² Seeger’s conception of folk song dissemination is a remediation of broadcasting by folk singing, in which the folk singer incorporates the ontology of point-to-multipoint transmission.

Indeed, although Seeger critiques ‘Shows’ for their lack of intimacy, his work and writings also point to a pleasure taken in the act of mediation, a pleasure in transmission for transmission’s sake. We have already glimpsed this disposition in ‘If I Had a Hammer’. Quite appropriately (as he has had many hammers), Seeger’s discography constitutes an almost preposterous number of recordings – over 100, at this point.⁷³ In a self-review of his career, covertly published in the 1960s under his wife Toshi’s name, Seeger takes pride in the sheer volume of transmissions he has emitted.⁷⁴ He acknowledges that not all of his emissions will be successful, that some will fall by the wayside:

Does a performing artist have the same right to spew out thousands of recorded performances to the commercial market, without being judged for the poor ones as well as the good ones? [...] If one could dub onto a tape a few songs from here and there on his many LPs, one might have quite a good one-hour tape of Pete Seeger. The trouble is, no two people would make the same selections. Therein lies his defense.⁷⁵

Although he began his career working as a cultural emissary of the Old Left, Seeger seems sensitive to the violence that inheres in imposing aesthetic or political systems onto others. This receiver-oriented exploration of hypermediacy is also nicely illustrated in Woody Guthrie's song 'Mail Myself to You', which Seeger often included in live performances and which he also recorded. 'I'm gonna wrap myself in paper, I'm gonna daub myself with glue / Stick some stamps on the top of my head / I'm gonna mail myself to you'.⁷⁶ Seeger tried to counter McLuhan by claiming that the envelope is not the message, but here we see that it is indeed: 'I'm gonna mail myself to you'. There is a provocative selflessness in this figure of the singer as both sender and seed. The folk singer transforms into the medium, and the conjunction becomes a gift for the audience to open how it pleases.

Many scholars (both sympathetic and critical) of the folk revival have missed, then, what is one of the more interesting features of the field's (or at least Seeger's) latent theory of communication. Serge Denisoff, for instance, argues that the first generation of the proletarian folk-song movement was based in face-to-face performance situations (the Almanac Singers indeed played primarily at union rallies, etc.), whereas the revival of the early 1960s was distributed primarily through LP recordings.⁷⁷ Even though Robert Cantwell is much more sympathetic to the revival than Denisoff, he still wants to distance this musical culture from the degraded and degrading medium of television.⁷⁸ Seeger's take on the folk process, however, gives us a much more subtle understanding of media ecology, for we can see that broadcasting and a specifically televisual ontology were central to Seeger's deliberations on the politics of dissemination. David Ingram articulates the general understanding of Seeger's image when he claims that 'Seeger's political values were informed more by pastoral nostalgia and American nationalism than by the dogmatic economic materialism of the Communist Party',⁷⁹ but Ingram too misses the profoundly mediatized concept of scatteration. The concept of mobile, mediatized, and boundary-crossing seeds that Seeger has passed on challenges both nostalgia and nationalism.

A Time-Biased Guerilla

Seeger's broadcasting ethic is not simply a utopianism wherein the more transmissions the better, a liberal-democratic celebration of the benevolence of the marketplace of ideas (or, it is both this naïve utopianism *and* something else).⁸⁰ For Seeger, not all transmissions are created equal. The air into which one sings is a field of power in which corporate control and spectacular entertainment plays a malignant role:

For thirty years I assumed that the kind of songs I sang would be black-listed from the mass media. I was resigned to it. I am no longer. America does not have 'all the time in the world' to solve its problems. The rulers of all our mass media must be blasted loose from their tight control; genuine controversy (not fake controversy) must be heard or there will be hell to pay.⁸¹

To sing into the air is potentially to disrupt hegemonic structures via the warfare of material media, and, in these battles, one must reach for the tools at one's disposal, each of which has its own particular capabilities: 'Before I leave Duke I'm going to take a stone with me, and put it in my banjo case, and if I ever meet a TV man up there who says he won't cover a story like this because there's no violence, *something* is going to get hurt.'⁸² Banjos and stones are media suited to different sets of situations; however, both share in common the mobility and flexibility Seeger values in the activist's arsenal. As he writes of his years on the blacklist,

It may seem a farfetched comparison, but for many years I figured I pursued a theory of cultural guerilla tactics. I could not hold a steady job on a single radio or TV station. But I could appear as guest on a thousand and one disc jockey shows, say a few words while they played a few records. I could not hold down a job at the average college or university, but I could appear to sing some songs, and then be on my way.⁸³

With his light, flexible toolbox in hand, nomadic Seeger engaged in guerilla information war, quickly attacking with the help of larger media networks (local radio and television stations, universities and colleges) and then just as quickly hitting the road.

Seeger sought a flexibility and dynamism in his tactical manoeuvrings, and a quick recap of his more famous campaigns reveals a guerilla-like attentiveness to situation. While blacklisted from television and also

many live venues in the 1950s and 1960s, he made due by travelling the United States, playing on college campuses, and releasing recordings on independent labels such as Folkways; in the 1970s, he sailed up and down the Hudson River on a nineteenth-century sloop he had had recreated, stopping for concerts along the way in an attempt to raise awareness of the industrial pollution that had despoiled this landscape;⁸⁴ he recently joined the crowds at Occupy Wall Street for some folk singing amplified by the utterly technologized 'People's Microphone'; and, prior to Occupy, he accompanied Bruce Springsteen at the Lincoln Memorial for Barack Obama's inauguration. The last example hardly seems like a 'subversive' or tactical cultural project, but, as Mark Pedelty has pointed out, Seeger slipped into his rendition of 'This Land is Your Land', Woody Guthrie's three original ('communist') verses, which have largely been excised from the songbooks in American schools.⁸⁵ Thus, the folk singer once more sized up the situation and reached for a tool (this time grabbing his public persona, which partly derives from his historical cache as someone who participated in the Civil Rights movement), meanwhile casting a few more seeds.

There are connections to be drawn between Seeger and the communist guerilla theories of, for instance, Giap, Mao, and Guevara, the latter two of whom Seeger romantically endorses in some of his writings. Seeger's ethics of reception make him a somewhat anomalous theorist and practitioner of cultural guerilla warfare, however, for even Guevara remained firmly within the Marxist-Leninist idea of the revolutionary vanguard. As Guevara puts it, 'The guerilla band is an armed nucleus, the fighting vanguard of the people.'⁸⁶ Truth and meaning, for Seeger, derive not from the vanguard or even 'the people' conceived as one body, but from the larger multiplicity of possible ways of engaging with the world. Truth, for Seeger, lies in the 'distribution of the sensible', to borrow a concept from Jacques Rancière.⁸⁷ According to Rancière, the critical theory tradition has often sought to educate 'the masses' in one way or another,⁸⁸ but Seeger sees value in the diverse horizons of experience from which his audience comes to meet his transmissions.

Seeger's theory of dissemination thus puts him much more in line with contemporary theorizations of tactical media, which have often emphasized the heterogeneity and eclecticism of cultural resistance.⁸⁹ Groups such as Electronic Disturbance Theatre, whose online protests drew international attention to the Zapatistas' struggles, or the Yes Men, who have manoeuvred ironic critiques of corporate culture from within mainstream media networks, are direct descendants of Seeger insofar as they emphasize both receptivity and media-specific pragmatism. Obviously, the reliance (and almost obsession) with *digital* media demonstrated by some tactical media

theorists puts Seeger's tools in sharp historical relief. Still, David Garcia and Geert Lovink's 'The ABC of Tactical Media' make the lineage clear:

But it is above all mobility that most characterizes the tactical media practitioner. The desire and capability to combine or jump from one media to another creating a continuous supply of mutants and hybrids. To cross borders, connecting and re-wiring a variety of disciplines and always taking full advantage of the free spaces in the media that are continually appearing because of the pace of technological change and regulatory uncertainty.⁹⁰

In the 1960s, power had not yet pervaded the network model, and so 'rhizomatic' guerilla manoeuvrings could automatically appear as strikes at the heart of the system.⁹¹ Still, Seeger, as well as tactical media artists and theorists, understands the necessity of fostering disturbances within 'the system' and of 'making do' with the tools ready to hand. In a piece published in the *Harvard Alumni Bulletin* in 1969, Seeger even suggests abandoning the slowness and dialogue essayed on his television programme, in the name of tactics: 'I'm not suggesting cluttering up the screen with long-winded scientists. Any industry that can sell deodorant, mouthwash, and gasoline with commercials that are more entertaining than the program should be able to do the same with other types of information.'⁹²

There are, however, also differences worth noting between Seeger and the discourse of tactical media, differences that make Seeger not just a historical pit stop in a genealogy of such practices, but a thinker perhaps worth returning to yet. As McKenzie Wark has argued, tactical media discourse suffers from an insistent focus on ephemerality over time.⁹³ Wark suggests that we adopt the long-view characteristic of both strategic and logistical thinking.⁹⁴ Others have echoed Wark's observations on the limitations of tactical media discourse, which initially seemed content merely to play and experiment in the interstices of power's grip.⁹⁵ Seeger's eclectic writings, however, straddle both the topographic concerns of the nomadic tactician and the 'time-biased' longings of a strategist. The purpose of shooting so many projectiles in the first place was that some of them, some day, might eventually bear fruit, which usually requires the setting of some kind of roots. In a move that Harold Adams Innis would have approved of, Seeger balances the immediate (i.e. tactical) concerns of space and the more strategic dimension of time.

Thus, on one hand, Seeger grasps the 'smooth space' of the battlefield, on which he moves quickly and dexterously; on the other hand, however,

he is keen to build institutions with weight. In 'The Copyright Hassle', for instance, he applies his multimodal pragmatism to the question of copyright law. The naïve folk fan might claim that all music is shared, and so copyright law in the field of folk music should not apply (because it should not apply to any culture), but Seeger recognizes his positionality within a capitalist network of musical production, in which major labels are able parasitically to squeeze the public domain without cost. With this in mind, he makes some concrete proposals, which blend tactical and strategic concerns: he proposes that corporations in the music industry should be required to divert funds into a 'public domain' pool that could then be used to fund the collecting of folk songs; he proposes that copyright holders of a particular version of a folk song should only be protected for five years instead of 56; and he proposes that the 'public domain' fund could be used to sue those who illegitimately utilize folk resources.⁹⁶ Though ever sensitive to the need for speed and mobility, Seeger also wants us to start digging, for lines of flight only take us so far. 'A wall is necessary at times,' as he puts it in his discussion of 'Cocacolonization'.⁹⁷ Seeger recognizes the importance of building structures and institutions (from unions to rivers), which, one can only hope, might last. Are not some things, including diagrams of communication, worth defending, preserving, even with an axe, as needed?

A Rainbow Quest

This chapter has attempted to revisit Pete Seeger, focusing in particular on his journalistic writings and on some of his songs, as a media and communications theorist. Mass media were not something to be excluded from Seeger's toolbox; they were to play a crucial role. From the subtle slowness possible on television to the power of singing, Seeger envisioned broadcasting itself as a utopian ringing. Yet, in Seeger's time-biased tactics, we can find a productively conflicted attention to both difference and heterogeneity, on one hand, and durability, on the other: '[W]hether it's a family, a corporation, a church, a university, a political party, a nation-state, a union, a nonprofit group – if you want it to live a long time, treasure the internal opposition'.⁹⁸ Seeger's folksy seeds scatter in difference, but some might, in time, lead to something.

Perhaps one of the most valuable contributions Seeger has to make to tactical media theory, which has been evident in the above discussions if not explicitly analysed, is his unflappable energy and optimism. Whereas tactical media were '[g]rown out of despair rather than conviction',⁹⁹ Seeger's

pen, voice, and transmitter generated a bubbling and incessant hopefulness, which even after Seeger's passing in 2014 lives on in the documents, recordings, and diagrams he has bequeathed to us. In a historical moment in which the digital condition has led to '[n]ervous breakdown, psychopathology, panic, depression, suicidal epidemic',¹⁰⁰ we should treasure and derive sustenance from these materials.

In an interview with the *Whole Earth Catalogue*, David Kupfer asks what advice Seeger has for young people, to which he responds in a way that is equally utopian and realistic: 'Keep your sense of humor. There is a 50-50 chance that the world can be saved. You – yes you – might be the grain of sand that tips the scales the right way. It's a joyful, very exciting time. Live long!'¹⁰¹ Seeger's optimism was not a product of utopian cloud-gazing; it was a material effect of his connections to groups and bodies:

[E]verywhere in our country, and throughout the world, there are more and more good little things happening. Little organizations. Little political groups, little religious groups, little scientific groups, little cultural groups. Little groups, like the Hudson River Sloop Clearwater, which are partly scientific, partly political, partly cultural. And all these little organizations realize that they have to reach out and co-exist in some way.¹⁰²

Seeger himself knew and often remarked that his homespun optimism probably seems 'corny', but it, too, is a tool that, like any other, has its uses.

3. Bob Dylan's Noisy Faces

'There is nothing that is major or revolutionary except the minor.

To hate all languages of masters.'

Deleuze & Guattari¹

A group of docile, grey, passive followers are led into an auditorium wherein they are bombarded by the audiovisually induced ideology of an oppressive totalitarian society. The messages of 'Big Brother', projected to the masses via a cinema-sized and information-laden video interface, appear part of a vicious cycle through which their passivity is consistently reinforced. Yet, all is not lost. Into this positive feedback loop a colourful, flexible guerilla warrior bursts onto the scene, generating a symbolic disturbance within this mass-media architecture. Spinning like an Olympic athlete, she hurls a hammer (is this what Seeger had in mind?) directly into the screen. The seen-yet-unseen new revolutionary device, which the Super Bowl commercial mythologizes but does not show, is a new personal computer. 'Macintosh: So 1984 won't be like 1984'.²

The diagram of communication undergirding Apple's famous ad, and its powerful company and brand, did not materialize out of thin air. This common 'topos' (or recurring motif) in media history marked the Romantic movement wherein communication tools were understood as transparent, flexible apparatuses through which 'the spontaneous overflow of powerful feelings' of individuals, as William Wordsworth influentially put it, could be expressed.³ One strong, countercultural enunciation of it unfolded in July, 1965, on the main stage of the Newport Folk Festival. In opposition to a constraining scene wherein form and content had begun to ossify, a brilliant young poet with a shiny new tool (a Fender Stratocaster) stood back and apart, ripping out merely three defiant, expressive attacks: 'Well I try my best / To be just like I am', he sang on the first number, 'Maggie's Farm'.⁴ Like the colourful, hammer-wielding Olympian in the Macintosh advertisement, Dylan stood above and apart, simultaneously generating a disturbance from within.

I am not the only one to want to place Bob Dylan's technologized but Romantically authentic image and work alongside Apple's Macintosh. Steve Jobs himself did so at the initial unveiling to Apple shareholders of the promising new product. 'I'd like to open the meeting with part of an old poem, about a twenty-year-old poem, by Dylan. That's Bob Dylan', the

mischievous former hippie teased his salivating crowd before reading a verse from ‘The Times They Are A-Changin’:

Come writers and critics who prophesize with your pens
And keep your eyes wide the chance won't come again
And don't speak too soon for the wheel's still in spin
And there's no telling who that it's naming
For the loser now will be later to win
For the times, they are a-changin'⁵

As Christopher Ricks observes, Dylan's anthem is in the present progressive tense, which ‘might epitomize this song about being progressive at present.’⁶ The song is therefore complimentary to Jobs's product launch and advertisement, which portrays a dynamic vision of the future from within a continuous now. Beyond the prophetic voicing of this particular song, Dylan's image was also an excellent choice of association, defined as it was and is by restless movement, avant-garde innovation, and expressive individuality, but also mass appeal and chart-topping success.⁷

Steve Jobs was a big fan of Bob Dylan. A friend from his teenage years recalls the hours they spent hanging out in the late 1960s: ‘I don't remember ever listening to anything other than Bob Dylan tapes.’⁸ Ironically, though the corporation he cofounded would become a key player in the still-unfolding enclosure of the Internet's function as collaborative cultural commons – in part through the online music store iTunes and MP3 player iPod – young Jobs's fandom was expressed through an obsessive quest for illegal bootleg recordings of Dylan concerts.⁹ This obsession would persist. Dylan is included, along with Albert Einstein, John Lennon, and Gandhi, in the ‘Think Different’ television ad of 1997, in particular Dylan's leather-jacket-wearing, electrified, 1965 incarnation. ‘You can learn a lot about people by hearing who their heroes are. So we said, “Okay, we'll tell them who *our* heroes are”’, Jobs said of the Emmy award-winning ad.¹⁰ An early iPod commercial also features the bard, and the first song that he played in his first iPhone demonstration was ‘Like a Rolling Stone’. Below these overt synergies between Jobs, Dylan, and Apple run profound affinities, too, notions of what exactly it is that creative people do with machines. The medium is not the message for Dylan fans, it has often seemed, or for Apple fans; great minds *think*, and transparent *tools* (be they pens, typewriters, electric guitars, personal computers, or even mobile music players) are conduits for self-possessive monads of creative production (or, ironically, consumption).¹¹

By articulating Friedrich Kittler's concept of 'discourse networks' with Félix Guattari's concept of 'faciality', this chapter will explore Dylan and Apple as machines of subjectivation – as assemblages that both represent and make possible particular ways of understanding the materialities of self, society, and technology. I explore how one diagram involving Dylan constitutes a modelization of Romantic authorship: the contributions of writing machines are effaced, and expression is framed as an aesthetic act of pure intention. In the latter section of the chapter, I refocus my emphasis, considering aspects of Dylan's 'star image' and writings that contradict Apple's rhetoric of the channelization of creativity.¹² Here, I pay particular attention to Dylan's mid-1960s albums and to the medium of the typewriter, thereby retrieving a post-humanist and media-theoretical line buried beneath the Romantic diagrams that have been so strongly amplified. This chapter could thus be considered both as a critique and as a tactical inhabitation of Apple discourse via Dylan, wherein we gaze and listen and scrounge, looking for weapons.

Much has been written about Bob Dylan's work and image.¹³ So much has been written, in fact, that it now seems a cliché even to remark that there are several clichés across this body of writing.¹⁴ At any rate, one consistent focus in 'Dylan studies' has been the question of identity – the various means by which Dylan's lyrics and 'star image' probe and disassemble various 'establishment' articulations of selfhood, in particular in his mid-1960s songs, through the embrace of avant-garde poetic practices and/or latent theoretical content.¹⁵ For instance, Aidan Day's exploration of identity in Dylan's work focalizes the songs through a psychoanalytic register, finding tensions between 'energies of the psyche which lie outside the limits and control of the rational self' and the ordering principles of stable Enlightenment selfhood.¹⁶ Moving more into the territories of Jacques Derrida, poet and literature scholar Stephen Scobie finds in Dylan's work 'the self which is itself but not quite itself – rather, identity as doubled, divided, or deferred'.¹⁷ More recently, John Hughes's *Invisible Now: Bob Dylan in the 1960s* offers an insightful and lucid treatment of this theme, among others: 'The songs can be said to forge strange circuits and unforeseen connections of thought, new dynamics and exchanges of desire, new reversible poles of identity and feeling.'¹⁸ Ironically, another consistency in literary approaches to Dylan, however, despite the deep engagement by Day, Scobie, Hughes, and others with various post-structuralist frameworks, has been a latent 'embrace [of] individualism'.¹⁹ This is most often registered on an aesthetic level, wherein Dylan is positioned variously as a Romantic or Modernist (or Postmodernist)

author-genius.²⁰ My understanding of Dylan is indebted to the interpreters of Dylan's surrealist mid-1960s period; I also, in the first section below, retrace some of the territory already covered by sociological approaches to Dylan's charisma and talent, in particular *Lee Marshall's Bob Dylan: The Never Ending Star*, which considers the social and economic forces that work on and through Dylan's shifting image.²¹ Yet, it seems to me that introducing the question of media, which has not yet been done, can push Dylan's apparent critique of 'the self' even further – past the solipsistic Nietzschean 'self in becoming', past the signifier-fetishizing games of Derridean deconstruction. Thus, by deploying folk archeology, according to which 'machinic autopoiesis asserts itself as a non-human for-itself',²² I want to position 'Dylan' and digital media at a new crossroads. On one side of Bob Dylan is the Romantic immediacy valued by Apple and mainstream digital culture, and thus a functional connection to neoliberal ideology, which Miller has brilliantly if briefly located and critiqued within Dylan discourse.²³ On the other side, however, are media assemblages in which agency is multimodal and distributed – a truly noisy scene.²⁴ Individualized, privatized creativity versus an aesthetic acknowledgement of the rhizomatic cross-imbrications of creativity, communication, and machines: Which side are you on?

'Folk' Dylan and His Media

Bob Dylan grew up in Hibbing, Minnesota, worshipping rock 'n' roll stars and Hollywood rebels like Marlon Brando and James Dean. It was not until shortly before he briefly attended the University of Minnesota that he discovered folk music, quickly immersing himself in the genre's conventions and canon. Drawn to the burgeoning folk scene in Greenwich Village in 1961, Dylan dropped out of college and made his way to New York City, where he received a favourable review in the *New York Times*, which in turn led to a record deal with Columbia. His first three LPs (*Bob Dylan*, *The Freewheeling Bob Dylan*, and *The Times They Are A-Changing*) drew heavily on aspects of the American folk-song canon, and, by his third album, he had become known as a leading 'topical' songwriter, who borrowed traditional chord patterns and harmonies but sang about contemporary political issues (the Civil Rights Movement in particular). Joan Baez; Peter, Paul and Mary; and Pete Seeger all covered his material, and he was invited onto the Ed Sullivan show but refused to play (like a good protest singer) when they censored his song choice ('Talkin' John Birch Society Blues').

Although the 1964 release *Another Side of Bob Dylan* irked many of the folk field's Old Guard (Irwin Silber lambasted Dylan publicly for the apolitical direction he seemed to be taking), it was in 1965 that he most dramatically severed ties with folk and protest culture: he famously went 'electric' at the Newport Folk Festival, where he had previously been hailed as the next Woody Guthrie, and as a writer he was increasingly working towards a more surrealist and avant-garde poetic vision.²⁵ At least, these are a few of the signposts and events often discussed and repeated – *ad nauseum*, as Miller bitingly indicates – in both popular and academic accounts of Dylan's career in the 1960s.²⁶ This is the story of Dylan that Jobs would come to love.

According to Lee Marshall, young Dylan's songs already articulated an individualism that was at odds with the earlier proletarian folk-song movement: 'In Dylan's work individual experiences have always been the most important thing'.²⁷ The point that Dylan constitutes a turn to individualism in the folk revival is also made by Hampton, who is more moralistic in his evaluation:

After the 1960s, certainty gave way to ambivalence. In the lyrics of some of Bob Dylan's songs from this period the problems are buried in deep symbolism and dark imagery. The answers were no longer obvious; they were merely 'blowing in the wind'. The motives of the protest singer had become increasingly ignoble. [...] The protest singer came to value his career and artistic integrity above the utopian one.²⁸

With regards to descriptions of the act of writing, however, it seems to me that in the nascent star discourse enveloping the singer across his 'folk' phase (c. 1962–1964), and in his own work during this time, Dylan himself seems variously positioned as both folk mouthpiece and individual stylist, roles and functions interestingly in conflict. In a *Sing Out!* feature published in 1962, Gil Turner discusses Dylan's indebtedness to tradition, and his tendency to write new words but to deploy old chord progressions and melodies. Turner quotes Dylan himself, who is modest in taking credit for his own work as an author: 'The songs are there. They exist all by themselves just waiting for someone to write them down. I just put them down on paper. If I didn't do it, somebody else would'.²⁹ Dylan seems to be more of a mere *writer* – or amanuensis – than an author; he is a medium for the anonymous contributions of a reservoir of prior creators. Dylan the inscription mechanism is without consciousness or agency ('If I didn't do it, somebody else would'). He merely '[puts the songs] down on

paper'. The folk singer seems to flirt here with Karl Marx's notion of the 'general intellect' – itself perhaps a materialist spin on the Grimm Brothers's earlier conception of the anonymous 'folk' – which spans generations and is a collective production. Dylan is the general intellect's secretary or paper machine. In a similar vein, one of his first compositions, 'Song to Woody', acknowledges that both the experiences of the poet, and his mode of representing them, have preceded him. According to this homage, the voice through which Dylan sings and the world it sings about have already been occupied and understood. Dylan's might be a privileged position (though Woody 'knows', it is possible that the audience does not yet 'know'), but it is nonetheless one that has been taken up before, and thus the task of the writer and singer is explicitly to revive something that has already been, to channel a pre- or trans-individual awareness, and *to write it*.

Of course, already evident too is the individual and his personal style; Dylan might draw on folk resources in his inscription practices, and acknowledge these debts, but his reception seems to have been immediately split between this fact and the allegedly individual creativity and personal charisma of the rising star.³⁰ This points to a different modelization of communication. The aforementioned Gil Turner article of 1962 is titled 'Bob Dylan—A New Voice Singing New Songs'. A Robert Shelton piece in *The New York Times* from the same period, 'Bob Dylan Sings His Compositions', remarks at how Dylan 'breaks all the rules of song writing'.³¹ Comparisons are drawn to Rimbaud and Yevtushenko, but the unique vision of Dylan is the primary theme: '[...] Mr. Dylan's words and melodies sparkle with the light of an inspired poet.'³² Similarly, Sidney Fields in the *New York Mirror* explains that Dylan was once indebted entirely to his folk forbears, but that he now writes from within himself: 'His songs always start as stories. When he was on the road he became a fine teller of other people's stories. But he quit that. "*Because Dickens and Dostoievski and Woody Guthrie were telling their stories much better than I ever could,*" Bob Dylan says, "*I decided to stick to my own mind.*"'³³

Dylan's prose, pseudo-autobiographical piece 'My Life in A Stolen Moment', which was included in the programme for a concert in 1963, also seems conflicted. Recalling Jack Kerouac's travelogues, the narrative follows a mythologized version of Dylan from his home in Minnesota through hitchhiking journeys across the United States; also recalling Guthrie, the text presents Dylan as a rugged individual in search of unique experiences.³⁴ In the midst of the rugged individualist's self-mythologizing, however, he pauses to speak of his sources:

I can't tell you the influences 'cause there's too many
 to mention an' I might leave one out
 An' that wouldn't be fair
 Woody Guthrie, sure
 Big Joe Williams, yeah
 It's easy to remember those names
 But what about the faces you can't find again
 What about the curves an' corners an' cut-offs
 that drop out a sight an' fall behind
 What about the records you hear but one time
 What about the coyote's call an' the bulldog's bark
 What about the tomcat's meow an' milk cow's moo
 An the train whistle's moan
 Open up yer eyes an' ears an' yer influenced
 an' there's nothing you can do about it³⁵

Dylan frames himself as a clear channel plugged into multiplicity.³⁶ The messages and the codes alike are derived not from his own inner genius but from the complexities of modern life, made up of fleeting social experiences ('the faces you can't find again'), ephemeral consumer culture ('the records you hear but once'), industry and technology ('the train whistle's moan'), and even the non-human world ('the tomcat's meow'). Dylan's hydra-headed muse is an overflowing phylum of becoming-animal and becoming-machine, to which one needs only to open one's eyes and ears in order to be 'influenced'. *There's nothing you can do about it*, he writes.

These competing diagrams – collective reservoir versus individual genius – would be subjected to varying degrees of tension in 'folk' Dylan's star discourse. Mainstream critics emphasized his eccentricities as a performer and his talent as a poet; on the other hand, the folk revival's gatekeepers (Newport Folk Fest organizers, *Broadside*, and *Sing Out!*) often preferred to emphasize his status as a mouthpiece of a larger cultural movement and tradition of protest.³⁷ Consider Ronnie Gilbert's introduction of Dylan at the 1964 Newport Folk Festival, a year prior to his 'electrification':

They tell me that every period, every time, has its heroes, every need has a solution and an answer. Some people—the press, magazines—sometimes think that the heroes that young people choose lead the way. I tend to think that they happen because they grow out of a need. This is a young man who grew out of a need. He came here, he came to be as he is, because things needed saying, and the young people were the ones who wanted

to say them, and they wanted to say them in their own way. He somehow had an ear on his generation. I don't have to tell you, you know him, he's yours, Bob Dylan.³⁸

Dylan's face and ears hover above, but only slightly above, an entire generation, which itself has written the poet into existence; Dylan's very being is attributed to a *collective* need to speak in a new way.³⁹ Somewhat paradoxically, Gilbert grants credence to a modernist reading of Dylan (this is a 'new' way of speaking) while simultaneously locating his very innovativeness within social and cultural forces.

Despite the conflicted nature of his status as a writer in his early star discourse, as a performer, 'folk' Dylan's relationship with *media* would remain relatively consistent. Much like many other stars across the history of American folk music, from Aunt Molly Jackson to Joan Baez, 'folk' Dylan (c. 1962–1964) was framed as dressed down, unaccustomed to the ways of the studio or to technology.⁴⁰ For instance, a televised Canadian performance aired in 1964 stages Dylan in a rustic cabin setting, performing (microphone not visible) to the card-playing lumberjacks and workers around him.⁴¹ Dylan seems to express his songs directly back to the people from which they had been derived. Tracking shots of the audience are interspersed with close-ups of Dylan's pale visage, which is framed as the clear interface between the folk and their cultural heritage revisited. Similarly, at the beginning of his performance of 'When the Ship Comes In' at Dr. Martin Luther King's March on Washington in 1963, which was televised across the nation and a significant moment in 'folk' Dylan's star narrative, a man in a grey flannel suit hurries over to adjust Dylan's mike. The technological apparatus and the 'squares' that facilitate it seem to strain to capture Dylan's sincere message. The performer himself seems unconcerned, however, with the medium. He appears not to notice the older soundman, focusing only on his ('direct') communication with the audience. Voice of the folk or not, this is a face that does not need any tools.

Of course, even 'unplugged' Dylan was, in fact, reliant on a massive arsenal of machines as a creative worker, for, since the advent of electric-amplification technology in the 1920s, musicians have gone 'electric'.⁴² And yet, the *mis-en-scène* described above lends the singer an uncanny ability to shoot through the techno-infrastructures of studio recording and 'live' performance alike; thus, 'folk' Dylan can indeed be read with Simon Frith's critique of folk ideology in mind. Frith saw an impoverished notion of immediacy in the folk revival, and here indeed the mediating effects of technology, industry, the star system, and consumer culture more generally

are effaced from the presentation.⁴³ It appears as though Dylan presents his voice in a face-to-face, intimate setting for those about and for which he sings, but he is a star, a commodity, recorded and transmitted by a massive and thoroughly industrialized and commercialized apparatus.⁴⁴

'Poet-God' Dylan and His New Tools

Dylan famously moved away from his role as a voice of protest, which caused a furor with some of his fans and friends; Dylan's turn was away from broader social issues and towards the personal experiences of alienation and longing, from universal questions to individualized and increasingly abstract experiences and perceptions.⁴⁵ The hopefulness that marked both the revival and Dylan's early work was traded in for a more apocalyptic and tragic sensibility.⁴⁶

Irwin Silber called out Dylan early in an open letter (published in 1964, before his 'electrification' at Newport), complaining not only that the singer who now travelled with an entourage had noticeably begun to remove himself from his listeners at concerts and festivals (which is what *pop stars* do, not folk singers), but also that his lyrics had abandoned themes of social protest in favour of an absurdist, existentialist philosophy; Silber echoes aesthetic debates in Western Marxism begun decades earlier (e.g. Adorno's modernism versus Lukács's social realism): 'Your new songs seem to be all inner-directed now, inner-probing, self-conscious – maybe even a little maudlin or a little cruel on occasion.'⁴⁷ But those who defended Dylan's changes did not fundamentally disagree with Silber's reading. Paul Nelson, for instance, also in *Sing Out!*, lauded *Highway 61 Revisited*: 'It is a highly personal style-vision: Dylan's unyielding and poetic point of view represents a total commitment to the subjective over the objective, the microcosm over the macrocosm, man rather than Man, problems not Problems.'⁴⁸ The disagreement was over whether or not existentialist-absurdist poetry was itself of value, and over whether the songwriter was obliged (and able) to represent the world or only his self.

The transition from topical protest songs to surrealist poetry, and from acoustic to electric guitar, involves marked media-ecological shifts as well. As Simon Frith puts it: 'By "going electric" Bob Dylan embraced all those qualities of mass culture that the folk movement had rejected – stardom, commerce and manipulation'.⁴⁹ Dylan traded in his folksy acoustic for electric Fender guitars; and for the fogies at *Sing Out!* and *Broadside*, the problem of *media* was part of Dylan's lamentable mid-1960s turn. As Dylan

powered through his electric set at Newport 1965, Seeger famously cried for an axe so that he could cut the microphone cord.⁵⁰ Although Seeger's own views are more complicated, in common perceptions of his alleged distaste for Dylan's new direction (the sheer noise, the indiscernibility of the linguistic articulation), we see an acknowledgment of, if also a wish to conceal, the materiality of technological media. The fuzzy weight of the medium was drowning out the first responsibility of the protest singer – that being the delivery of simple, comprehensible, and politically engaged messages.⁵¹ Dylan, it was believed, was not paying enough attention to the receiving end in his new system.

And yet, for rock critics and fans – including Steve Jobs, who listened mostly to bootlegs of Dylan's *electric* concerts (c. 1965-1966), we are told – noise was not a problem; it was just another signal.⁵² It too could be hermeneutically interpreted as the willful expression of the poet. As Nelson writes of Dylan's new direction:

To put it as simply as possible, the tradition that Dylan represents is that of all great artists: that of projecting, with the highest possible degree of honesty and craftsmanship, a unique personal vision of the world we live in, knowing full well that unless the personal is achieved, the universal cannot follow.⁵³

The original ambiguity with respect to source (collective reservoir versus individual genius) seems here to be resolved. The source is Dylan, not the folk; however, his relationship to his tools seems relatively unchanged. That is, they are mere interfaces between the creator and the created, vessels of authenticity.⁵⁴ Thus, in 1965, when asked how he composes, he responds much differently than he had in his work shirt and jeans a few years prior: 'Well, I just sit down and the next thing I know it's there.'⁵⁵ Although Dylan's mid-1960s turn is often summed up as 'plugging in' or 'going electric', both phrases that highlight a marked leveling-up of mediation,⁵⁶ the electrified machines wielded by the artist are figured as extraneous extensions of his will. Whether Dylan is onstage with a shiny telecaster, or hunched over his typewriter (as he is seen doing in a memorable scene in the 1967 documentary *Don't Look Back*), he seems to be transparently emitting his 'uniquely personal vision'. This language codes over even scholars who otherwise deploy post-structuralist approaches in which authorship is discursively constructed in their work. Hughes writes, for instance, 'To be oneself in a yet unknown way, after all, is at the heart of what the songs describe'; 'He is without connections and history, yet also charting new

territory'.⁵⁷ As the Derridean deconstructionist Stephen Scobie describes Dylan's work in the 1960s, 'Artistic creation simply pours out of Dylan during this period, unceasingly and effortlessly, and without (seemingly, though it may be dangerous to exaggerate this point) very much in the way of conscious control'.⁵⁸ Scobie knows the danger, and yet he cannot help it. Strategic media diagrams die hard.

Feedback Squeal #1: 'Discourse Networks' and 'Faciality'

In *Discourse Networks*, Friedrich Kittler explores the Romantic literary culture on which Dylan's mid-1960s image greatly draws (the lone innovator, who creates out of nothing but himself). Whereas in the 'Republic of Scholars' texts endlessly referred to a circuit of other legitimated texts, the 'Age of Goethe' was marked by novel relationships between inscriptions, souls, and voices.⁵⁹ Emergent Romanticism in the early nineteenth century tended to elide the materiality of the signifier; readers and authors were disciplined into understanding inscriptions as communing with the *signified*, as thus communing with *content*, the signified here often being the soul of the poet.⁶⁰ According to Kittler, this was a complex hallucination effected by a host of media and institutions. Via the process of universal alphabetization, readers were taught to interpret printed matter as the continuous, sensual handwriting of sensitive poets: 'The great metaphysical unities invented in the age of Goethe – the developmental process of *Bildung*, autobiography, world history – could be seen as the flow of the continuous and the organic simply because they were supported by flowing, cursive handwriting'.⁶¹ Others have critiqued and historically situated the Romantic 'author-function', but Kittler emphasizes the role of media within historical configurations of authorship, in addition to institutions and practices.⁶²

This way of approaching media's relationship to subjectivity is a contribution to the now centuries-old tradition of post-humanist thought. Karl Marx and Georg Lukács showed how liberal individualism was both created by and in the service of capitalist power structures.⁶³ Freud analogously unseated the conscious subject by claiming that the ego is only a medium in the midst of a technically unknowable field of drives and traumas.⁶⁴ In Kittler's case, it is the technologies we use to record and transmit ourselves that have always already disrobed transcendental consciousness and self-presence. Subjectivity is a product of exterior others such as pens, phonographs, typewriters, film, and fiber-optic data streams. Indeed, Kittler's periodization of media change since the Enlightenment is a narrative of increasing fragmentation and erasure, a

tale of increasing post-humanization. The smooth handwriting of Romantic individuals is exploded by the new media of the late nineteenth century:

Typewriters do not store individuals; their letters do not communicate a beyond that perfectly alphabetized readers can subsequently hallucinate as meaning. Everything that has been taken over by technological media since Edison's inventions disappears from typescripts. The dream of a real visible or audible world arising from words has come to an end.⁶⁵

Digital convergence altogether erodes the distinctions between technological media; we cease even to be able to perceive the apparatuses that inscribe our histories, oblivious to all but the 'surface effects' offered by the interface.⁶⁶ Yet, much like the Romantic author who obscures the reach and complexity of the discourse network that made him possible (which, according to Kittler's account, includes mothers, university professors, and literary pedagogies), our easy-to-use pointing and clicking that seems to command our operating systems obscures the underling material structures of the digital condition.⁶⁷ We speak of software and of users, but there is only hardware, to paraphrase Kittler.⁶⁸

If the discourse network of 1900 has consigned the Romantic author to the dustbin of history, as Kittler claims, what are we to make of its persistence in American culture, from the Beats, into the 1960s counterculture, on through to contemporary digital consumer culture? Félix Guattari offers a concept that is compatible with Kittler's 'discourse networks' and that highlights the political stakes of materialist orientations towards media (which Kittler somewhat stubbornly refuses to pursue). According to Deleuze and Guattari, 'faciality' exists at the intersection of 'subjectification' and 'significance' in modern capitalist social formations.⁶⁹ It is a point of convergence, in a sense, between linguistic systems of order and the more embodied processes of discipline that Louis Althusser describes as 'interpellation'.⁷⁰ Bundles of sensation and desire, widely varying strata of meaning and possibility, are crystallized via the constitution of individuated identities, which appear to us focused through the face. For the Marxist-Nietzschean Guattari, all is becoming and flux, but systems, signifiers, and disciplinary apparatuses pin down this self-undoing, immanent movement – the face being one such marker of disciplinary inscription. Not false but not true either, neither natural nor inevitable, faciality is the condition of being marked as a being with a face, as an individual.

To think of the artifice of faciality is not to say that some groups do not have eyes or noses for organs, for example, but merely to think about the

historicity of these markers: '*Certain assemblages of power (pouvoir) require the production of a face, others do not.*'⁷¹ Technologies of subjectivation go to work on heterogeneous strata of becoming, infecting not just faces per se but entire realms of code, from the couple to the family to private property: 'Concrete faces cannot be assumed to come ready-made. They are engendered by an *abstract machine of faciality (visagéité)*, which produces them at the same time as it gives the signifier its white wall and subjectivity its black hole.'⁷² Thus, the face for Deleuze and Guattari is a crucial focalization of power. Faces are not only regions of our flesh made to appear a certain way (i.e. ways of 'reading' the self). They constitute arbitrary and contingent windows or ports: into 'the soul' (or 'unconscious') and out onto an apparently ordered world. And they can be hooked up to or magnified by apparatuses, such as painted portraits, filmic close-ups, or digital selfies.⁷³

In his book on Guattari, Gary Genosko describes faciality as 'a fundamental category of redundancy of the machinic unconscious'.⁷⁴ We too can think of the concept in terms of information theory. If the entropic quality of group subjectivity pushes out and beyond individuals and their discrete bodies and minds, capitalistic faciality is the negentropic force that pushes back by cancelling noise and making meaning of our selves. In other words, faciality is the difference that makes a difference right between your eyes. Just as cybernetic and information theorists Claude Shannon and Norbert Wiener sought to minimize the noisiness of channels, capitalist faciality abhors the parasitic hunger of the medium and the materiality of message-transmissions:

The investigation of the concrete role of faciality in capitalistic pragmatic fields will only further highlight the absurdity of the path that consists in reducing speech and language to a simple transmission of messages. This essay began with the question: 'how do we escape from language?' But it is primarily through its facial substance that language escapes itself, fleeing in all directions. Every proposition only receives its social weight of truth insofar as a 'service' faciality takes charge of it. Every segment of signifying discourse is a tributary of faciality traits that 'manages' its morphemes, that supports them in relation with dominant significations or deprives them of their sense.⁷⁵

By reducing immanence to discrete, exchangeable units of expressivity, faciality presupposes a disavowal of material infrastructures (including our writing machines).⁷⁶ Faciality shores up the deep eyes of our sensitive poets, whose souls seem to pour out onto their blank pages or screens.

Although media make possible various modalities of capitalist faciality (Deleuze and Guattari cite the filmic close-up, but think also of the Facebook profile pic, or the smooth pens of the Romantic era explored by Kittler), for Guattari, the disciplining of subjects is always an unstable affair. Technology is a key tool in the breaking apart of molar subjectivations. On this point, Guattari parts ways with the airtight rigidity of Kittler's framework (indeed, it could be said that the late German media theorist makes Althusser sound like Timothy Leary). For Guattari, faciality is a site of struggle:

Faciality then generates an optional micropolitical subject constantly moving between two states:

- that of facializing, globalizing, binarizing, phallicizing forms in constant resonance with social roles and the capitalistic Imaginary;
- that of singular faciality traits which, on the contrary, are likely to interact with machinic redundancies conveying new quanta of the possible while crossing the faces, being connected to other singularity traits of all kinds, circumventing micro black holes of anxiety and culpability....⁷⁷

Faces float like tethered balloons above heterogenous battlefields of hardware and data, but there are many faces, some of which, with the help of machines like performance and sound art, tactical media, or folk music, break past that individualizing triangle of nose, eyes, and mouth.⁷⁸ Literature and music for Guattari are important fields of possibility in the reclamation or generation of machinic facialities.

Steve Jobs and Capitalist Faciality

As already mentioned above, Jobs saw Dylan as a hero. According to his high-school girlfriend Chrisann Brennan, Jobs even spent time with a typewriter in a cabin in his late teens, rapturously pounding out his own versions of Dylan lyrics.⁷⁹ His fan-boy love was not only about the music; he was also drawn to the artist's image and brand. Jobs admired the way he appeared to move only in the opposite direction of the crowd:

One of my role models is Bob Dylan. As I grew up, I learned the lyrics to all his songs and watched him never stand still. If you look at the artists, if they get really good, it always occurs to them at some point that they can do this one thing for the rest of their lives, and they can be really successful

to the outside world but not really be successful to themselves. That's the moment that an artist really decides who he or she is. If they keep on risking failure, they're still artists. Dylan and Picasso were always risking failure. This Apple thing is that way for me. I don't want to fail, of course. But even though I didn't know how bad things really were, I still had a lot to think about before I said yes. I had to consider the implications for Pixar, for my family, for my reputation. I decided that I didn't really care, because this is what I want to do. If I try my best and fail, well, I tried my best.⁸⁰

There are several clichés and truisms of the American entrepreneurial spirit running through Jobs's self-mythologization, but the nugget that interests us here is the thoroughly modern distinction between the will of the artist and the will of all others ('the outside world'). Fans and followers and critics ('who prophesize with their *pens*') are of no account in Jobs's understanding of the creative self, and neither are the networks of techniques and technologies that cut across it. Jobs's role model is not the highly differentiated recording industry that made Dylan's mass reach possible, or Edison's cylinder phonograph and its ancestors, or the noisy amps Dylan overdrove at Newport, or the typewriters he clacked away on in cars and above cafés (which might not have been surprising, given that Jobs was in the writing machines business), or the soundmen, or the groupies. It is Dylan. 'That's Bob Dylan', as he emphatically reminded his shareholders in 1984.

As if following a script written by Jobs, the outpouring of obituaries following his death in 2011 sought to understand the entrepreneur's contributions in a Romantic light. At the same time that Occupy Wall Street gathered momentum (which we will think more about in the next chapter), Jobs was admired for his talent, for his eccentric *je ne sais quoi*, and for his determination to change the world using only his gut as guide. In one of the more sycophantic remembrances, Michael Malone in *The Wall Street Journal* writes:

Every generation produces a few individuals whose will to restructure the world in their own image is so powerful that they seem to distort reality itself. They change the world, not always for the better – and that in the U.S. they often choose to pursue entrepreneurship and industry rather than politics is one of the uncelebrated blessings of American capitalism. Mr. Jobs – who emerged from an uncertain childhood brilliant, charismatic and charged with an ambition that would make most mortals blush – is one of those figures, a fact recognized even before he reached adulthood. As his fame and power grew, so did the reach of his will. ...He began that arc by willing the modern personal computer into existence.⁸¹

The original Macintosh team consisted of dozens of artists, engineers, and programmers; at the time of Jobs's death, Apple employed thousands of collaborating thinkers, which is all aside from the fact that Apple definitely did not single-handedly '[will] the modern personal computer into existence'.⁸² This is only to scratch the surface of a digital discourse network also involving coltan mining in the Democratic Republic of Congo, manufacturing in the notorious Foxconn factory in China, the intellectual work of ad agencies, and the affective labour of sales and service representatives.⁸³ Underneath the smooth handwriting that Jobs is thought to have scribbled across the IT industry, we might consider the high-speed algorithms that motor trade and speculation (including of Apple stock) at lightning speeds.⁸⁴ Yet, Jobs's individualized, Romantic face is the 'black hole' through which these complex systems are recognized as the simple expression of one talented man – a brilliant artist who is encumbered neither by machines nor by trends but who pushes through his own will onto the noise of reality. As Jobs put it in the beloved commencement speech he gave at Stanford, 'don't be trapped by dogma – which is living with the results of other people's thinking. Don't let the *noise* of others' opinions drown out your own inner voice.'⁸⁵

It is not only Jobs who can write in this noise-cancelling manner. We can become like Dylan too with the transparent vessels of creativity Apple offers. The Romanticism of American computing does not begin with Jobs or Apple, as Fred Turner and Thomas Streeter have explained in detail,⁸⁶ but Apple has made particularly synergistic use of Romanticism, framing both the corporation itself and the tools it produces as conduits of immediacy (the former serving the artist Jobs, the latter serving the consumer). As far back as the original Apple logo, though it was soon abandoned in favour of the minimalist fruit image, we find an inscription by the Romantic poet William Wordsworth. The forgotten cofounder of Apple, Ronald Wayne, recalls:

They had hit upon using the name of Apple [...] And around the border I put in the philosophical comment: 'A mind forever voyaging through strange seas of thought alone.' Which of course comes from the Wordsworth sonnet. And that line seemed to fit perfectly with the whole concept of this wonderful new product.⁸⁷

A mind thinking alone must be without collaborators or material agents of inscription, and this claim to transparency cuts across the whole history of their marketing campaigns, from the '1984' ad, which frames the Mac as intuitive guerrilla weapon, to the '*Think Different*' ads, to the recent

campaign featuring cool Mac Guy versus dully bureaucratic Windows Guy, through to recent product names (e.g. iGadgets).⁸⁸ In addition to thought, however, we now voyage through the strange seas of sound and information alone, as Michael Bull's fascinating study of the individualizing and isolating dimensions of iPod culture has made clear.⁸⁹ Thus, it is entirely appropriate that Dylan be called upon to appear in an iPod add, being Jobs's appointed patron saint of solipsistic individualization. A television spot in 2002 nicely sums up this long legacy: 'Mac OS10 gets out of your way, whereas Windows wants to constantly be in your face all the time.'⁹⁰ The Mac and its little cousins get out of your way so you can just be, voyaging alone, unencumbered by others or by anything: 'I can't hear you anymore'.

Feedback Squeal #2: 'Chaosmosis' and Machinic Faciality

In *Anti-Oedipus*, Deleuze and Guattari observe that '[d]esiring-machines work only when they break down, and by continually breaking down'.⁹¹ Creativity is corralled by molar sinkholes like capitalist faciality but constantly de- and re-territorialized by competing blocs and forces. The Cartesian ego, the Lockean labourer and communicator, and the Romantic author, for instance, are abstract machines of subjectivity that persist in various fields but that are necessarily and constantly under threat. Cybernetics, anonymity, hacktivism, and tactical media are just a few domains wherein their ability to self-replicate has become compromised. Guattari emphasizes the role that material media theory can play in such micro-political processes of de- and re-subjectivation:

Just as social machines can be grouped under the general title of Collective Equipment, technological machines of information and communication operate at the heart of human subjectivity, not only within its memory and intelligence, but within its sensibility, affects and unconscious fantasies. Recognition of these machinic dimensions of subjectivation leads us to insist, in our attempt at redefinition, on the heterogeneity of the components leading to the production of subjectivity.⁹²

Guattari revels in the multiplicity of ways and possibilities of being, but his theoretical project is not about cancelling out false subjectivities in favour of the truest ones; rather, the ethico-aesthetic projectiles he launches across his solo work aim to amplify and cross-pollinate our limits. Guattari's theory is a bandwidth boost for collective forms of coexistence and praxis.

Thus, faciality (which we have seen function as an imprint of capitalist, serial individualities) is always already disintegrating. An 'ethico-aesthetic' apprehension of the face, and the messages it sends, would look straight into the eyes of our sincere poets but see beyond them, straight down to the heterogenous, medial ground upon which the self can only seem to stand: 'Neither the symbolic entry into the order of faciality nor transcendent symbolic facialities exist. Faciality can oscillate to the side of serial identification, but it can also operate on behalf of desiring machines.'⁹³ In this spirit, we can consider how Dylan, although he did so much, perhaps unwittingly, for our Macs' GUIs, also helps us to 'think different' for real.

Dylan's Noisy Channels

One of the Mac's key marketable features was usability: if you can point, you can use a Mac, some early ads said. The machine would not get in the way of your need to transmit. When Dylan turned away from protest songs, his move was also away from meaning, and away from pointing. 'There aren't any finger-pointing songs in here', he said of *Another Side of Bob Dylan*.⁹⁴ In 1965, Dylan lampooned artists who would serve only as *informational* relays, a practice he had seemed to take pride in only a few years earlier: 'Message songs, as everybody knows, are a drag. [...] What I'm going to do is rent Town Hall and put about thirty Western Union boys on the bill. I mean, then there'll really be some messages.'⁹⁵

Dylan's mid-1960s songs indeed move away from content (which both Dylan and McLuhan agreed are a drag) and towards the media that might carry them. We are repeatedly drawn to communication diagrams in which messages do not arrive, in which they joyously morph or mutate over the course of transmission. Machines of various sorts get in the way. In 'Black Crow Blues', the speaker listens to billboards flapping in the breeze, his wrist without a watch but his nerves 'kickin', tickin' like a clock'.⁹⁶ In 'Chimes of Freedom', he is again tuned into unlikely frequencies, shadows emerging from sounds and ringing chimes exploding into flashing lights. There seems to be no decipherable meaning in these synesthetic signals, however: 'Through the wild cathedral evening the rain unraveled tales / For the disrobed faceless forms of no position / Tolling for the tongues with no place to bring their thoughts'.⁹⁷ Dylan had championed the down-and-out in earlier songs; here, he seems rather to champion the 'faceless' and 'disrobed' materialities of communication – the 'tongues with no place to bring their thoughts' (tongues that must not have access to a GUI).

Images of channels, noise, and translation run through the three 'rock' albums (c. 1965), written and recorded roughly within a single year. In 'Mr. Tambourine Man', laughter, spinning, and swinging are broadcasted but 'not aimed at anyone' in particular.⁹⁸ Tambourines, as Scobie observes, are not the best conduits for *songs*; the speaker seems drawn rather to the thing itself, its jingle-jangle, which comes to pervade the entire landscape, including time.⁹⁹ In 'It Takes a Lot to Laugh, It Takes a Train to Cry', 'the windows are filled with frost', and the speaker 'went to tell everybody, but [...] could not get across'.¹⁰⁰ In 'Stuck Inside of Mobile with the Memphis Blues Again', the voice 'would send a message / To find out if she's talked, / But the post office has been stolen / And the mailbox is locked'.¹⁰¹ Reception is not always deferred, as on 'Pledging My Time' ('Well, they sent for the ambulance / And one was sent').¹⁰² It's just that we are not sure who sent it, or where the request ended up.

Miscommunication can indeed be frustrating or anxiety-inducing for all involved; however, in part via an infamous penchant for rhyme and a vocal style that pushes words far beyond merely linguistic articulation and melody, engagements with miscommunication in Dylan's mid-1960s work appear to find pleasure and resonance in noises (without making them into signals necessarily); they thereby tend also to lend validity and sometimes agency to things. Already on 'All I Really Want to Do', for instance, an earlier move away from 'protest' songs on *Another Side of Bob Dylan*, a receiver who is also a transmitter seeks to reimagine the arts of connection. The voice professes not to want to 'drag you down or drain you down', 'select you or dissect you', 'simplify you, classify you': 'All I really want to do / Is, baby, be friends with you'.¹⁰³ This is reception conceived not as understanding or deep expressivity, but as mere embrace. As John Durham Peters observes, transparency in communication can be a violent process.¹⁰⁴ Dylan's imaginary communication diagram, on the other hand, seems about letting go and finding justice in parasites. 'i accept chaos. i am not sure whether it accepts me', he admits on the liner notes of *Bringing It All Back Home*, but he may as well give it a shot; and he eventually does: 'When your mother sends back all your invitations [...] Won't you come see me, Queen Jane?'¹⁰⁵ Here again, the speaker promises a kind of connection that is not a commission, or an explanation, or even speech, but a potentially new kind of post-self-other encounter.

Blonde on Blonde, the third of Dylan's 'rock' records, has perhaps two of the most startling and stunning meditations on media and communication to be found in this period. In 'Visions of Johanna', various agencies speak without necessarily making it through:

Lights flicker from the opposite loft
 In this room the heat pipes just cough
 The country music station plays soft
 But there's nothing, really nothing to turn off
 Just Louise and her lover so entwined
 And these visions of Johanna that conquer my mind¹⁰⁶

How are we to receive information, and from what kinds of sources? It is clear that to focus on the sending from point A to point B is sometimes to veil the possibilities of material community, because there is nothing to turn off – no signal, or at least not one that matters, only the medium itself, coughing, flickering, getting in the middle. It is media all the way down. In the strange but stunning final refrain, 'the harmonicas play the skeleton keys and the rain / and these visions of Johanna are now all that remain'.¹⁰⁷ Yet, we have, by this point, heard, read, and felt so much besides visions of Johanna (indeed, we seem not to see her at all through the song). Thinking back to 'folk' Dylan's 'A Hard Rain's Gonna Fall', his poetic voice was once in self-present control.¹⁰⁸ By 1966's *Blonde on Blonde*, however, the poet's Romantic face and voice seems to have been exploded from within, 'splintered and reconstituted in a multi-faceted assemblage'.¹⁰⁹ We move below the singular voice of the singing star and his signifiers to find a wide range of faces, themselves bound up, 'so entwined', with other assemblages, including people, gadgets, tools, games, and instruments.

Others have noted the surrealistic poetics of Dylan's electric trilogy that I have been retreading here, and the opacity of his lyrics vis-à-vis earlier political material. On 'Visions of Johanna', Aidan Day reads the song as a meditation on 'the subterranean energies of the psyche',¹¹⁰ and John Hughes similarly claims that 'the voice pries open obscure regions of the self and taps into them'.¹¹¹ Meanwhile, in a Derridean move Stephen Scobie locates within the song 'an energy that asserts itself [...] as a vivid and painful presence that is also an absence'.¹¹² There appears to me here, however, as on much of his mid-1960s work, when the performance and music and words are considered altogether, to be more plenitude than absence – and more multitudinous distribution than inner depth or division. The speaker(s) are indeed losing a grip on conscious self-presence, but the place they are moving towards is not just a split or subconscious self, or language games, but the material and variegated terrain of a dark-yet-dazzling media ecology, where flashlights can be heard, blindman's bluff can be played with key chains, Mona Lisa can get 'the highway blues', fish trucks can load, and

consciences can explode. The self is not just split or multiplied or deferred, in other words, but *extended*.

The buoyant opener of the album, 'Rainy Day Women #12 & 35', also probes a joyful, material, and distributed diagram of noisy communion. Alongside a New Orleans-style marching band we hear the speaker receiving all sorts of unwanted signals, or an unwanted signal within all sorts of situations: 'They'll stone you when you are walking home' / 'They'll stone you when you're there all alone'.¹¹³ In the bulk of the verses, Dylan maps an oppressive model of sending and receiving as mobile flagellation wherein, no matter your position, you get sent a blow. A Walkman or iPod with a target on it, perhaps, isolating and drawing oneself inward yet also inflicting various forms of pain. The speaker grabs these heavy missives, bending them towards new purposes in a tactical media intervention: 'But I would not feel so all alone, / Everybody must get stoned!'.¹¹⁴ Using punning but also 'that wild mercury sound', as he would later describe it, Dylan's voice here finally does 'plug in'.¹¹⁵ An isolating projectile is appropriated as a meshwork of solidarity and corporeal fellow feeling.

Dylan's Typewriter

Darren Wershler-Henry has explored typewriting as a modern technological assemblage. Connecting typewriting discourse to Paul Virilio's thoughts of modernity as a 'dromocratic revolution', he explores how authors such as Jack Kerouac and William Burroughs explored new registers of both discipline and play – the will-to-speed being a central feature of typewriting culture.¹¹⁶ The speed of typing, Dylan's overt indebtedness to this particular thing, runs wild through Dylan's rock work as well.¹¹⁷ His folksy syntax famously explodes into often-illogical jumbles of images and rhymes, a move for which we might give the typewriter equal credit, for one can almost picture the keys clacking along with the raucous opener of *Bringing it All Back Home*:

Johnny's in the basement
 Mixing up the medicine
 I'm on the pavement
 Thinking about the government
 The man in the trench coat
 Badge out, laid off
 Says he's got a bad cough
 Wants to get it paid off¹¹⁸

The machinic propulsion of Dylan's cadence pulls us away from any referents and towards the signifiers themselves, which is the mark of the typewriter according to Kittler and Wershler-Henry.¹¹⁹ Rather than the individual poet reaching into his genius to express a poem, the song seems to be written (and sung) by a machine, the poet in turn having become only a typist.

The face of the typewriter looks a bit different than the face of the Romantic poet. Whereas 'folk' Dylan claimed to have used a pencil to take down the songs already waiting for him, consider Joan Baez's description of Dylan's new assemblage:

Bob stood at the typewriter in the corner of his room, drinking red wine and smoking and tapping away relentlessly for hours. And in the dead of night, he would wake up, grunt, grab a cigarette, and stumble over to the typewriter again. He was turning out songs like ticker tape.¹²⁰

The integrity of the finished poem is discarded here in favour of an endless reel of letters on pages: 'i will nail my words to this paper, an fly them on to you. an forget about them [...] thank you for the time. youre kind', as he puts it in his 'novel' *Tarantula*, written in the mid-1960s but not published until 1971, which indeed reads more like typed pages than a literary 'work'.¹²¹ (*Tarantula* throughout plays with both meanings of 'letter', for the novel intersperses elusive narrative with a series of postcards.) As has often been the case in typewriting culture, this machinic process makes who or what is actually writing difficult to discern.¹²² As the liner notes of *Highway 61 Revisited* conclude:

I cannot say the word eye any more. [...] when I speak this word eye, it is as if I am speaking of somebody's eye that I faintly remember. [...] there is no eye – there is only a series of mouths—long live the mouths – your rooftop – if you don't already know – has been demolished. [...] eye is plasma & you are right about that too – you are lucky – don't have to think about such things as eyes & rooftops & quazimodo.¹²³

The integrity of the singular subject, who reaches into his soul for his poems, is shattered at the hand of this new appendage. No longer just one voice, or even a subconscious, he now seems to be a hydra-headed many, with no use for 'I'/eyes any longer and, apparently, with lots of pressure surging upwards from the belly, as he would also refer to the draft typescript of 'Like a Rolling Stone' as 'a long piece of vomit'.¹²⁴

Some descriptions of Dylan typing manage to position the machine as just another tool. Consider Robbie Robertson's description of Dylan's writing process:

When he and I went to Nashville in 1966, to work on *Blonde on Blonde*, it was the first time I'd ever seen a songwriter writing songs on a typewriter. We'd go to the studio, and he'd be finishing up the lyrics to some of the songs we were going to do. I could hear this typewriter—click, click, click, ring, really fast. He was typing these things out so fast; there was so much to be said.¹²⁵

Like Kerouac or Steve Jobs, Dylan's integrity as discrete and soulful subject above remains intact, the typewriter being only a spigot hanging off his wellspring of creativity, but one of Dylan's most iconic performances on film interestingly problematizes this model, lending credence to my reading of him as typist. In D. A. Pennebaker's cinéma vérité documentary *Don't Look Back*, the film opens with a proto-music video of 'Subterranean Homesick Blues'. Dylan appears in the middle of an alleyway holding a stack of cue cards (Allen Ginsberg and Bobby Neuwirth appearing to chant to the side, behind a garbage bin). The white cards contain text of nouns and phrases delivered over the course of the song (but not the entire work, and not always accurately transcribed). As the music plays, Dylan silently drops the cards, struggling to keep up with the beat, often falling behind. This ghostly presentation of material textuality and speed emasculates the poet of both his voice and hand. The song seems to write itself, the phrases and lines interchangeable just like any one key or inscription surface on a typewriter. Dylan's cool face seems cloudy and impenetrable here; he is only plugged into a series of mouths and machines, along for the ride.

Faces, Shades

Others have discussed Dylan's theatricality as a star and as a singer-songwriter.¹²⁶ Indeed, his current popular image – as articulated in Todd Haynes's film *I'm Not There* (2007) – is of a consummate performance artist, a shape-shifting actor constantly reinventing himself anew. In a masterful and rich reading of Dylan's mid-1960s output (including images and publicity), John Hughes pushes back against the 'trope of the mask' in Dylan studies, arguing that 'the ideas of a mask or ventriloquism themselves distort and obscure the ways in which self-renewal works in Dylan's songs

and throughout his career'.¹²⁷ I take this to mean that Hughes wishes to find performativity not just on the outside but 'behind' the mask(s) as well. It is masks all the way down: '*Je est un autre*', as Rimbaud wrote, which Dylan quoted once and which now Dylan fans cannot stop quoting. Yet, 'machinic faciality' moves us even further than such dramaturgical and existentialist readings, which miss out on the tactical potential of Dylan's writings as weapon of self-undoing. As Guattari puts it, 'I is an other, a multiplicity of others, embodied at the intersection of partial components of enunciation, breaching on all sides individuated identity and the organized body'.¹²⁸ There are, in other words, multiple facialities that might be generated by the infamous Rimbaud/Dylan line, some more open than others.

Many faces indeed have been generated by this monstrous body of texts, images, and recordings, and the possibilities charted above all persist: the folk channel of collaborative ancestors, the expressive individual, and the media-materialist schizoid assemblage. Steve Jobs understood Dylan's face as a window between Dylan's own brilliance and a public struggling to catch up, and this Dylan's connection with transparent vessels of creativity was translated (even if it was not the only source) into Apple's rhetoric of microcomputers as tools of personal liberation. The recent discourse surrounding Dylan's Nobel win, notwithstanding the hot debates over the 'literariness' of song, has further amplified the solitary individual expressive diagram. Ironically, even Dylan's recent appearance in an IBM ad extends this rhetoric. In the spot, when IBM's A.I. 'WATSON' asks Dylan about his oeuvre, we are meant to compare the powers of these two impressive but fundamentally distinct creative agents.

And yet, by putting Kittler and Guattari to work on some perhaps unlikely texts, we have seen that there are other ways of interpreting Dylan's output in the 1960s. Dylan the typist's ego seeped out towards the margins of the page, revealing his other faces to be only glitches, and this Dylan also persists, if less visibly, in popular culture. In a significant episode of *Battlestar Gallactica*, for instance, Dylan's 'All Along the Watchtower' is the song that disrupts the thought patterns of five hidden Cylons, who (through the song's weird magic) seem to kindle a rhizomatic, collaborative, and medium-specific form of self-knowledge.¹²⁹ Each machinic being articulates snippets of the song through the episode, and through this networked chorus, they find and build their guerilla community.

So, in addition to Jobs and his smooth white gadgets, we could consider other descendants of Dylan and his typewriter. Perhaps reminding us of Dylan's poor reception in Newport's garden of the folk (he was booed there, after all), Molleindustria's highly critical app *Phone Story* (2011) was banned

from the App Store within a few hours of its posting. A quick summary suggests the reason, for the player gets to: point semi-automatics at children toiling in a coltan mine; save suicidal Chinese factory workers, who have jumped from the top of the Foxconn factory to their deaths, with a trampoline; launch shiny commodities at zombie-like consumers who charge your store; and, finally, recycle the materials on a dangerous assembly line before it all plays over again on account of built-in obsolescence. Pete Seeger only *cried out* for an axe; Apple, on the other hand, had one ready, and they cut the cord. There are deeper parallels between Dylan and Molleindustria, however, for *Phone Story* too refocuses our attention away from clear transmissions and towards the meat and grime on the thing itself, including manufacturing and marketing work but also the algorithmic pleasures we derive from digital games.¹³⁰ Molleindustria's tactical media interventions are much more overtly political than Dylan's rock records (these games are akin to what Dylan called 'finger-pointing songs'). Yet, both Dylan and *Phone Story* foreground the channel and the desiring-machines below our only apparently clear interfaces, which in itself is often worth doing, if only because it gives that other faciality a fat lip or three.

4. A Folk Approach to Imaginary Media

In both the documents of the mid-century American folk revival and the tactical media ‘movement’, distinctions are consistently eroded between expert and amateur, theory and practice. For both Pete Seeger and (for instance) Geert Lovink, the point of singing or writing is so that others might in turn put the art and ideas to work—into their own concerts, songs, interventions, or disturbances (a process that might happen quickly or take a long time). There is thus an energetic and DIY hastiness to issues of *Sing Out!* and *Broadside*, magazines that published songs with an eye to their utility for the voices of their readers; we see this open spirit of generosity in the works of Lovink and the Critical Art Ensemble as well, the latter of which included instructions on Game Boy hacking in one of their books.¹ Of course, a ‘tinkerer’ impulse has also been evident in media-archaeological approaches to media history, wherein the generation of artworks and/or impossible technologies has been considered as intellectually valuable an endeavor as scholarly publication.²

While Media Artist in Residence at the University of New Brunswick in Fredericton, Canada (2014–2015), I attempted to allow these apparently divergent but in fact fellow-travelling tributaries to converge into a single organization, which I called ‘The New Brunswick Laboratory of Imaginary Media Research + Design’. Inspired by the Hootenannies and sing-alongs but also by the distributed-in-solidarity networks, databases, and writing machines generated by this complex tradition, my intention was to map the creative utopianism of the long American folk revival more directly onto the problematics of media-archaeological design, in a perhaps tactical way.³ Instead of swapping songs, or writing topical ballads, what if we got together and sang new channels? Might the collaborative act of discussing or sketching impossible communication technologies be conceived as a tactical media manoeuvre? Would we need to cover new territory, like solitary artists and scholars are obligated to do, or could we just find value in the ‘singing’ together itself?

As Jussi Parikka observes, the laboratory is a site of imagining that ‘[shifts] the coordinates of what is possible’.⁴ Several scholars of imaginary media history have similarly looked to the design of communication technologies (which all, at one point in time, were mere fictions) and the relationship between such designs and sociocultural pasts, presents, and futures.⁵ The goal of my own folk-archaeological laboratory has not necessarily been to generate ideas that might be actually developed but to occupy the very

conception of possibility in the field of communication technology. What is the point of that? This chapter shifts gears by leaving, for the moment, this academic question aside and attempting merely to listen to the sounds.

The New Brunswick Laboratory of Imaginary Media Research + Design

Unconcerned with the borders of New Brunswick, workshops were held from Fall 2014 to Spring 2015 in the following locations: Fredericton, NB (in various classes at UNB); London, ON (at VibraFusionLab); Sackville, NB (at Struts Art Gallery); and Saint John, NB (at Third Space Gallery); and online submissions were also called for and accepted.⁶ All were welcome and the meetings were each intended to consist of a casual and accessible discussion of utopia and possibility/impossibility, as well as a participatory ‘drawing jam’, the fruits of which were slowly uploaded to the group’s Tumblr, to which interested readers are also invited to submit contributions.⁷

The meetings of The New Brunswick Laboratory of Imaginary Media Research + Design consisted of three acts. First, we began with a brief and eclectic presentation of the idea of imaginary media, primarily orienting the discussion around examples from science fiction and popular culture. Drawing on Kluitenberg, Zielinski, and Parikka, I fed into our organization a wide range of historical hunches and inclinations: Edward Bellamy’s utopian music networks; the impossible connections achieved by nineteenth-century spiritualism; Jorge Luis Borges’s infinite library; the concept of ‘cyberspace’; the Matrix; the Borg of *Star Trek*; Charles Cros’s plans to build a gigantic mirror with which, he hoped, the French government would be able to send messages to aliens; the space elevator; the singularity; the hover-board; and so on. I meant here to give participants a sense of the range of the category. Second, as an icebreaker and warm-up, I led participants through a group theatre exercise conceived by the late Brazilian theorist Augusto Boal. In his ‘The Power Game’, players are asked to enter into a tableau one at a time, in which power is wielded through position and gesture over other players.⁸ As I understand the procedure, the moderator of this exercise is to be intentionally vague in giving instructions, and so participants need not only to assume positions of greater or lesser power in the tableau but also to consider and reconsider again the flexible and relational nature of power (for instance, the first two participants might assume positions of physical strength against one another, but the third might pull out an iPhone camera and frame all other participants up to that point, thus reimagining the nature of power in

relation to technologies of surveillance and visibility rather than as mere brute strength).⁹ ‘The Power Game’ seemed an excellent way of collectively attuning ourselves to one of the foundational premises of an-archaeological imaginary media research, which is that things can be, could have been, and can become, otherwise. Finally, we began our collaborative design exercise. Each person in the workshop was to pick a medium and, at the top of a worksheet, to describe briefly its properties as we know and use it. We then passed the pages clockwise as we offered counter-properties and counter-characteristics. Anything was permitted. These worksheets then became the source materials with which we each began to sketch various imaginary media.¹⁰

What kinds of imagining did we do? The first category encompasses works that promise to solve problems of an everyday variety, to make particular processes of production or consumption, or communication, easier or faster. This work thus indeed overlaps with one longstanding ‘topoi’ of imaginary media identified by Kluitenberg, ‘imaginary media as media of abundance’.¹¹ For instance, the poet Linda Besner’s submission, *Writing Reward Apparatus*, combats digital distractibility by compensating industrious users with medals made of chocolate.¹² In a similar vein, Julian Higuerey Nuñez dreams of a cybernetic circuit through which negative stimuli could be administered to graduate students who do not respond to emails, the result being his *System for the Determination of Grad Students in the Reading of Emails*. (Similarly, one of many anonymously authored contributions, *Syllabus Retention Apparatus*, forcefully posts a syllabus directly in front of a student’s eyeballs.) In these designs, perhaps precarious creative and educational labourers have been able to express some of the anxieties of their work in their imaginary media creation—media of disciplinary abundance. Similarly direct problem-solving devices (also offering abundances of efficiency) were offered by Camille C. and by Anonymous, in *The Wireless Watch* and *Instant Sarcasm Warning* respectively. The former would avoid smartphone overage charges by proffering free access to wireless everywhere, and the latter would help to cancel out intergenerational miscommunications in online spaces.

A second category of imaginary media generated by the workshops includes embodiments—and, in some cases, grotesque exaggerations—of modern techne as explored by critics such as Martin Heidegger, Karl Marx, Jodi Dean, or Paul Virilio.¹³ Problems here are framed as technological: we only need more control, or alienation, or solipsistic individualization, or speed, yet the irony of the wager is stretched to absurd and often clearly critical degrees. For instance, Anonymous’s *Earth Fridge* explores a simple and practical solution to the climate crisis—just put the planet into a

cooling machine. Symptoms of overwork in the informational workplace might also have an easy fix; in the world in which Colleen Goguen's *Snooze Film* exists, the need to sleep—which Jonathan Crary has beautifully argued is the stubborn horizon of commodification¹⁴—can be finally colonized through this device. 'Need to study? Prepare for a presentation? Learn a new language? Rehearse some ideas? Then load your material onto a snooze film! OR pick from our library! Turn your REM cycle into work time!'¹⁵ *Earth Fridge* and *Snooze Film* position nature and human subjectivity as an endless 'standing reserve', as Heidegger has termed it, an amount of raw materials that can be manipulated, commanded, and utilized.¹⁶

Others of our designs extended human bodies—specifically the hand and the gaze—to more completely and efficiently command and control as appendages of circulation or accumulation. Drew Ritchie's *The Eye Phone*[™], for instance, transcends our current digital appendages by integrating hardware into the wetware of the human body, an not entirely imaginary prospect. Cailen Dye's *Human Drone* playfully swaps human for machine in our standard dronedriver configurations, allowing the user to be propelled as plane, the machinic extension now having a chance to pilot. Lily Furlong's *Outcomes and Events Prediction* promises a tight cybernetic loop of absolute knowledge; sensors are continuously scanned and monitored such that time and uncertainty each might be finally harnessed to computable strings of information (again, not an entirely imaginary invention). *Download and Project* similarly—and in relatively retro fashion—makes cyberspace actual space.

Another set of machines grounded in the tendencies of contemporary capitalist media culture exaggeratedly emphasized the individual. Vincent Manzerolle's brilliant imaginary search engine, *Affirm*, rejected the need to know or encounter anything outside oneself. 'The answer is inside you. Always', reads the tagline of Manzerolle's tool.¹⁷ Two contributors, interestingly in two different workshops, conceived of highly personalized cinema experiences. One, *Personal Theatre* by Anonymous, captures the magic of the cinema without the annoyances of mass culture: moviegoers sit in their own personalized pods, where they both listen and view in isolation; the pod seats are not even arranged in mass formation but are askew across the fragmented and winding space.¹⁸ Similarly, Anna's *Double-Sided, Volume-Controlled Cinema* again evokes the mass audience, but again also attempts to cater to individual viewers and their preferences. Filmgoers have two films to choose from, though they might also be the same film; either way, again sound is experienced not through the room in the clear company of others but through the headset.

Whereas the imaginary machines discussed so far either solved immediate problems or seemed overtly constrained by actually existing media and sociopolitical processes and discourses, a final set pursued the playfulness and pleasures of miscommunication and noise. Rather than being wishful accelerators of intellectual work, these imaginary communication technologies seemed bent on poetically slowing or breaking things down. Lauren Cruikshank's *Relaxomaxoscope*, for instance, promises to 'make things seem farther away / fuzzier [...] gentle remove', and a drawing of a stick-figure in a tiny pod floating across the stars is labeled, 'fleshy water bag bed, like snuggling'.¹⁹ *Relaxomaxoscope* zooms out and away from the tight coupling of crystalline cybernetic feedback loops to celebrate the pleasures of noise and communication breakdown. Meanwhile, media scholar Vincent Manzerolle's *Boggle* takes noise into an epistemological terrain. 'Forget whatever you were initially searching for! Random facts to astonish and distract you from your initial query!'²⁰ And in Jud Crandall's *Obfuscator*, a Rubik's-cube-like sphere boasts an incoherent array of icons and data: 'spherical', 'no predetermined orientation', 'no brain, ears, eyes', 'enclosed', 'subjective/suggestive information', 'emotional/impulsive', 'no buttons / all screams'.²¹ The binary aspect of our warm-up exercise seems transformed here into a delirious jumble of powers and possibilities, a 'mixed semiotic' of emotions, ailments, absences, and organs. Yet another by Anonymous explores the rhizomatic connections between virtuality and actuality: *Monument to Imaginary Event* crystallizes the impossible into a real and durable trace, thereby bootstrapping an unspecified nullity into existence. In a dizzyingly self-recursive loop, we wonder not only about things that could be but the archivization of what might once have been, what still could be and is.

Post-Mortem: Imaginary Media as 'Dialectical Utopia'

The workshops of The New Brunswick Laboratory of Imaginary Media Research + Design led to a wide-ranging, sometimes satirical and sometimes silly discourse about the possibilities inherent within our techno-cultural imaginary. Our machines were by turns critical, nihilistic, and hopeful. It seems to me that working in this fashion with imaginary media offers amateurs and specialists alike an accessible way into an important media-archaeological insight, which is that media history springs neither from the sky nor entirely from the economic laws of capitalist accumulation; media are rather malleable constructs that we make alongside broader social,

economic, and political forces.²² How might media be made, and make us, differently? Zielinski's gamble that forgotten, untaken paths in media history can unsettle our teleological narratives of media development was made material through practice and collaborative discovery.

One question unaddressed by the output of The New Brunswick Laboratory of Imaginary Media Research + Design, however, is the relationship between imaginary media generation and sociopolitical transformation. Caught up in a spirit of 'play time', it did not occur to me to make a space in the workshop for us to critique or sort through our designs, to deliberate together regarding which of our creations are best reserved for the 'imaginary' category and which are more or less actually existing already if in less exaggerated form, or which we might actually want to institute and what the consequences might be. For instance, we might have asked what logics are driving the alienating, isolating media discussed above, or how institutions might be built such that the more cloudy and noisy forms of communication envisioned by some participants could find a durable and accessible home. We might have considered the relationship between racialization and technological development, as, for instance, Afrofuturism research and creative practice have so admirably done,²³ which was a clear blind spot in our output as a whole. The workshops conducted to date aimed to arm participants with basic guidelines and a few possibilities, and then to get them into the laboratory working, together and alone. Still, we might have spent more time pondering not just weird or cool gadgets but the conditions and contexts within which communication technologies come to be.

Although both media archaeologists grounded in the writings of Foucault and tactical media practitioners swept up in postmodern nihilism might find this move alarming, in this final section, I wish to introduce the concept of utopia, which seems to me to be of use to the impasse sketched above. 'Utopia' remains a pejorative insult in some quarters, but the category of the utopian has seen resurgence over the past decades as an important genre within a variety of cultural and social fields. Whereas, for Marx and Engels, the utopian thinker was one whose head is in the clouds, ungrounded in the material realities of class struggle, thinkers such as Ernst Bloch, Henri Lefebvre, Zygmunt Bauman, Ruth Levitas, Thomas Moylan, Frederic Jameson, and others have more recently wagered to outline utopia's critical valences. For Zygmunt Bauman, for instance, utopia is an image of a future and better world that is

- (1) felt as still unfulfilled and requiring an additional effort to be brought about;
- (2) perceived as desirable, as a world not so much bound to come as one which should come;
- (3) critical of the existing society; in fact, a system of ideas remains utopian and thus able to boost human activity only insofar as it is perceived as representing a system essentially different from, if not antithetical to, the existing one;
- (4) involving a measure of hazard; for an image of the future to possess the qualities of utopia, it must be ascertained that it will not come to pass unless fostered by a deliberate collective action.²⁴

Or, as social theorist Ruth Levitas similarly defines the concept, it is merely ‘the expression of the desire for a better way of being’.²⁵ Not necessarily perfect or static, utopia reappears as a critical guidepost for radical thought and action. Already, we see a few productively vague guidelines that might be added to imaginary media discussions or workshop settings: Does this machine make it possible to conceive of or to transmit a better way of being? Does this media vision offer a way into critiquing social forces and tendencies as currently constituted?

An important intervention in utopian studies has been to dislodge the concept from modernist maps or plans that were too stultifying or even totalitarian, yet some have taken this farther than others. Consider proto-media archaeologist Michel Foucault’s ‘heterotopia’.²⁶ Rather than proposing grand visions for a ‘perfect’ society, Foucault seeks refuge in the cracks of the present, in places like theatres or even the sea:

There are also, probably in every culture, in every civilization, real places—places that do exist and that are formed in the very founding of society—which are something like counter-sites, a kind of effectively enacted utopia in which the real sites, all the other real sites that can be found within the culture, are simultaneously represented, contested, and inverted.²⁷

Recoiling from the authoritarian tendencies of utopia, Foucault reimagines particular corners of the present for their radical dimensions. Literature scholar Tom Moylan’s ‘critical utopia’ follows a similarly modest impulse, emphasizing the power of an endless play of negation and discussion:

[Critical utopia deviates from traditional utopias] by presenting the utopian society in a more critical light. Utopia is seen as ‘ambiguous’ (LeGuin) or, in a response partly to LeGuin, as ‘ambiguous heterotopias’ (Delany). Furthermore, in each of the new utopias the society is shown with its faults, inconsistencies, problems, and even denials of the utopian impulse in the form of the persistence of exploitation and domination in the better place. Here, of course, is echoed the historic failure to achieve perfection, a false goal in the first place [...].²⁸

Building on Moylan as well as Richard Rorty’s work, Ashlie Lancaster suggests that utopian thinking is not a matter of erecting a single, perfect elsewhere; rather, we need as many utopian visions as we can muster: ‘If we can create ourselves through redescription, then redescribing ourselves and our communities, and others and their communities, in terms of alternative vocabularies allows us to attain and become what we find desirable in those redescriptions.’²⁹ Lancaster moves past Moylan’s deconstructionism by pointing towards the need to eventually deliberate. Still, how do we determine what we find desirable? How do we sort through the actually existing heterotopias or the numerous critical utopias?

David Harvey’s work on utopia, *Spaces of Hope*, offers a productive rapprochement between visions of ‘a good place that does not exist’, on the one hand, and sociopolitical forces and exigencies, on the other; and it is in Harvey’s concept of ‘dialectical utopia’ that imaginary media makers might find a useful touchstone in future projects and discussions. First, Harvey considers the ways in which utopian visions and constructions have been used to hegemonic and oppressive ends. Shopping malls, city-centre plazas, gated communities, theme parks, and other such structures (we might add such media utopias as ‘the information superhighway’ or the personal computer) both conceal and foster urban degradation and class exploitation; such ‘degenerative utopias’ (the phrase is borrowed by Harvey from Robert Unger) grapple with the ‘desire for a better way of being’, but they relocate it within power-saturated, violent architectures, and ‘cultivate a nostalgia for some mythical past’.³⁰

Again drawing on Unger, Harvey divides potentially degenerate utopian projects into two categories: ‘Utopias of spatial form’ and ‘utopias of social process’.³¹ According to Harvey, each is limited in different ways. Utopias of spatial form often posit an end of history—a moment at which social change, struggle, and time itself come to an end (he does not discuss it, but Apple’s 1984 advertisement would be an example); the problem with utopias of spatial form is that ‘real history’ becomes abolished, and the desires of the

utopian dreamer become idealized and fixed.³² Yet, utopias of social process can also be degenerate. Teleological narratives such as Hegel's grapple with desire for a better way of being; a difficulty, however, is that the movement of World Spirit or of *laissez-faire* (two examples of utopias of social process) avoid the necessity of acting deliberately on the world: '[...] Utopias of the social process have the habit of getting lost in the romanticism of endlessly open projects that never have to come to a point of closure (within space and place).'³³ According to Harvey, temporal utopias often presuppose a magical flow along with which the present structure can move towards resolution and freedom.³⁴

Harvey synthesizes the utopia of spatial form and the utopia of social process through his concept of 'dialectical utopia'. Dialectical utopia goes beyond both by acknowledging that—if we are to actualize utopian desire—we must be authoritative: societies must exercise 'will' by building something, which is necessarily a foreclosure of some possibilities in favour of others: 'Any contemporary struggle to envision a reconstruction of the social process has to confront the problem of how to overthrow the structures (both physical and institutional) that the free market has itself produced as relatively permanent features of our world.'³⁵ This is Harvey's key contribution: dialectical utopianism is a spatiotemporal mode of dreaming of a better way of being that recognizes the necessity of making decisions and taking a stand, and that grapples with the reciprocal influences of our dreams on the world and the world on our dreams and selves; it is a utopianism that blends the long view of the strategist with the feel for the ground of the tactician.

An imaginary media practice informed by Harvey's 'dialectical utopia' would need to reckon, not only with the weird and the fun and the impossible, but with the (durable) institutions through and in which such gadgets might be produced and used. The task would not be to stop dreaming or drawing, but to expand the parameters of these discussions and thus to expand the connections and the collaborations: to focus not only on inviting artists and students of media, but sociologists, political scientists, classicists, and biologists; telemarketers, copywriters, and waiters; farmers and landscapers. Folk singers too. Imaginary media work does not need to get more realistic, but it does need to zoom out from 'media' conceived as easily demarcated consumer products, and towards media as situated within broader formations of practices, knowledges, environments, networks, and institutions. As Harvey states:

Struggle as we might to create flexible landscapes and institutions, the fixity of structures tends to increase with time making the conditions of

change more rather than less sclerotic [...] Free-flowing processes become instantiated in structures, in institutional, social, cultural, and physical realities that acquire a relative permanence, fixity, and immovability.³⁶

To put it in Innisian terms, we need to temper the consumer-oriented space biases of imaginary media work with a deeper consideration of time. Will this device last? Would we like it to? Why and how could that matter? What about the networks of production and circulation that its actualization would require? A discussion format informed by dialectical utopia might help The New Brunswick Laboratory of Imaginary Media Research + Design (or other such future experiments) to more decisively tackle the situatedness of these explorations of (im)possibility.

5. Another Authentic Folk Is Possible¹

'[A]ttach yourself to what you feel to be true. Begin there.'

The Invisible Committee²

The synergies moving across the histories of American folk music, digital culture, and (tactical) media theory particularly coalesce in a few of the moments that have appeared above: Dylan getting noisy on his typewriter, Lomax plugging in his soon-to-be-forgotten 'Global Jukebox', Seeger calling for a hammer and for a bell, the members of the New Brunswick Laboratory of Imaginary Media Research + Design grabbing pencils and attempting to generate new channels. In these diagrams of connection, conflicting desires and anxieties have sounded out, and persistent questions have been posed if not definitively answered. What does it mean to 'be real'? How can one become 'real', not alone, but rather in conjunction with the 'becoming real' of others? How are we to understand, and indeed nurture, the material media ecologies that have defined and sustained such projects?

Some readers may find all this reference to 'the real' alarming, and rightfully so, for the concept of 'authenticity' has had a troublesome history. Much of this trouble has stemmed from the concept of 'the folk'. Connections between racist and sexist notions of authenticity and the rise and more recent recombinations of fascism need not be recapped in detail here; suffice it to say that 'authenticity' has often been wielded as a dehumanizing weapon, a history that many scholars in the humanities and social sciences have attempted to critique and to trace.³ Participants in the folk revival were well aware of the problematic legacies of their traditions as well. In a short piece written around 1942, entitled 'Progressive and Fascists Both Sing Folk Songs', Pete Seeger considers how the Nazis relied on 'static' and 'naïve' folk visions, whereas the progressive movement of which he was a part 'responds most keenly to the expanding, militant side'.⁴

Despite Seeger's demonstrable openness as a folk theorist, however, his own approach famously appeared stale to the burgeoning counterculture that he had helped to form. In 1965 at the Newport Folk Festival, when Seeger allegedly exclaimed his desire to swing an axe through Dylan's electric guitar cable, he seemed to sum up for his critics the totalitarian tendencies of the notion: 'Big Brother' Pete, despite his good intentions, was

necessarily compromised, questing after a real that—even if it had once been possible—was now out of touch with the movement, with the youth, who themselves did not mind noise, machines, or rock ‘n’ roll. At least, this is how Dylan’s brand mythology positions the standoff.⁵ Paradigms in which authenticity makes sense do not have sufficiently sophisticated understandings of discourse, textuality, or mediation, as we would now put it, but Dylan and his fans knew this already: ‘Like a Rolling Stone’ remains a sharp refrain for those who intuitively grasp the inevitable slippage of being into becoming—for those tuned into the postmodern affect that Lawrence Grossberg would later describe as ‘inauthentic authenticity’, which ‘starts by assuming a distance from the other which allows it to refuse any claim or demand which might be made on it’.⁶ As Lee Marshall writes, drawing on Grossberg, ‘[W]ithin rock ideology, keeping on keeping on is a crucial motif both for individuals and rock culture as a whole [...] And, as for rock, so too for Bob Dylan.’⁷ There is no direction home and it is not me, babe.

Yet, narratives such as the one of Dylan’s electric ‘emancipation’—from ‘authentic’ but totalitarian solidarity and towards individualized, de-territorialized performativity—leave out the subtle understandings of media and authenticity that can be extracted from the writings and performances of Lomax, Seeger, and Dylan himself, among others. As my folk-archaeological approach has sought to illuminate, some kinds of folk authenticity come always already plugged in. Imaginary media, as we saw in the last chapter, can be useful rhetorical, critical, and even motivational tools, and, in the current chapter, I want to dig into this imaginary medium of authenticity. After discussing various critiques and recent defenses of the concept, I will make the point that the Marxian conception of ‘species-being’ points the way towards a non-essentialist and even media-theoretical remix. I will then unpack another strand in the media-cultural discourse of the folk revival, beginning with Woody Guthrie’s writings and the ‘Hootenanny’ machines he brought to New York City with Pete Seeger in the early 1940s, and finally tracing this medial object to the People’s Microphone of the Occupy movement.

Authenticity and Its Critics

Of course, authenticity is not simply a thing out in the world that might be located and preserved; it is a discursive object, a product of modernity, and, like all such objects, it has a history.⁸ Early articulations of authenticity began to emerge in the West in the sixteenth century, though, as Lionel Trilling has

pointed out, Polonius's advice to Laertes in Shakespeare's *Hamlet* ('to thine own self be true') is not yet an example of authenticity but of sincerity: Laertes should be true to himself so that he cannot be false to anyone else.⁹ Authenticity, on the other hand, avoids such instrumentality—to strive for authenticity, to be or become what one is, is, by definition, its own end, rather than a means to an end.¹⁰ Authenticity proper begins to germinate in the thought of Jean-Jacques Rousseau, perhaps fully flowering in the Romanticism of Johann Wolfgang von Goethe and Friedrich Hölderlin, through to existentialists such as Jean-Paul Sartre and Albert Camus.¹¹ As Charles Guignon has shown, however, though Romantic conceptions of authenticity have been pervasive and influential, the concept has had a much wider reach.¹² Martin Heidegger and even postmodernists such as Richard Rorty work with various permutations of authenticity, even if certain features of modernist authenticity are problematized by postmodernist assumptions at the same time.¹³

Despite the richness and complexity of the concept, which has been reassembled and reimagined both within and against the pathways of modernity, many critics in the wake of postmodernism have taken particular aim at Romantic variations. (As Jacques Derrida, Jean Baudrillard, Pierre Bourdieu, and Michel Foucault argued to varying effects, the 'authentic' self is always already contaminated by that against which it might hope to define itself.¹⁴) The general popular contempt over the last decade for the figure of 'the hipster' is an especially visible continuation of this line of thinking, to which the comedy series *Portlandia* has given ongoing articulation. In one memorable episode, an avant-garde authenticity-seeker is followed by an apparent yuppie, and each cultural space, object, or activity to which the hipster finds 'authentic' connection is quickly declared 'over' simply by virtue of an apparently inauthentic Other having claimed it, rendering the entire quest a comically absurd waste of time, an empty sociocultural game. 'This bar is so over!' 'Fixed gear bikes are so over!' 'Guess what? Shell art is over!'¹⁵ Portland, Oregon has historical ties to the counterculture and to the trend of 'tuning in, turning on, and dropping out', but, in *Portlandia*, modernity's escapees seem to have finally run out of road. The compass that had been guiding them (authenticity) seems now to point nowhere at all.¹⁶

Portlandia's critique of 'the cool' and 'the authentic' points to a deeper discontent, for, in many corners of cultural theory and criticism, the general trend has been to abandon the concept as an applicable criterion of being. In his bestselling book *The Authenticity Hoax*, for instance, Andrew Potter explores how Western culture's pervasive and insatiable desire for 'real', 'homespun', and 'authentic' goods and experiences is fundamentally

misguided. According to Potter, the 'market economy' is a 'rich and vibrant source of value' that authenticity-seekers have tried to pretend to avoid, all the while looking to the market for the solution to their ailments (whether the solution be jeans, rock music, or anti-globalization magazines).¹⁷ Our problem is not the alienating social system we live in, but our very desire to escape from it: 'In order to see ourselves clear of the authenticity hoax, we need to come to terms with the modern world [...]'.¹⁸

Building on arguments made with Joseph Heath in their coauthored book *The Rebel Sell*, Potter points to real shortcomings in certain strands of leftist thought (in particular, the notion that oppression is so totalizing that any movement for reform must be looked at with suspicion); he also demonstrates a keen, critical eye in his readings of the logical contradictions within the more rarefied and highbrow strata of Western consumer culture.¹⁹ Yet, both *The Rebel Sell* and *The Authenticity Hoax* tend to flatten important categories and to avoid what are crucial distinctions (not to mention the authors' superficial readings of Marx and critical theory). Recalling arguments made by some of the post-structuralist contributions to authenticity critique—such as those voiced by Derrida, Foucault, and Pierre Bourdieu—authenticity is only considered by Potter as a relational signifier:

Absent from our lives is any sense of the world as a place of intrinsic value, within which each of us can lead a purposeful existence. And so we seek the authentic in a multitude of ways, looking for a connection to something deeper in the jeans we buy, the food we eat, the vacations we take, the music we listen to, and the politicians we elect. In each case, we are trying to find at least one sliver of the world, one fragment of experience, that is innocent, spontaneous, genuine, and creative, and not tainted by commercialization, calculation, and self-interest.²⁰

Potter is only willing to see authenticity within the structures and systems of distinction that mark consumer culture, but, with respect to the difficult task of collaboratively discussing the potentialities of remaking our selves and our world, are blue jeans and 'getaway' vacations the best we can come up with?

Potter draws on classical Enlightenment thought in his argument, but the concept of authenticity has taken shots recently from the radical left as well. This too builds on a longer tradition: Louis Althusser famously rejected 'Young' Marx's *Economic and Philosophic Manuscripts* for essentializing human being. For Althusser, Young Marx's concept of 'species-being' (that humanity's essence was to make its own essence) was not sufficiently 'scientific' and was

mired in bourgeois individualism.²¹ Althusser's commitment to the concept of totality parallels Theodor Adorno's roughly contemporaneous critique of existentialism. For the Frankfurt School scholar, authenticity as formulated by Søren Kierkegaard and Martin Heidegger constitute an undialectical shrinking away from the broader reality of social and economic forces:

No elevation of the concept of Man has any power in the face of his actual degradation into a bundle of functions. The only help lies in changing the conditions which brought the state of affairs to this point—conditions which uninterruptedly reproduce themselves on a larger scale.²²

Akin to the ideological vapour he had earlier described with Horkheimer as 'pseudo-individuality', authenticity is appealing precisely because it conceals its own structural causes.

Critical media scholars working within the Marxian paradigm have continued to consider authenticity as a functional component within contemporary circuits of production and consumption.²³ The idea has also taken some heat in discussions of organization and activism, such as in the work of writers associated with the 'Accelerationist' movement. Two leaders in this scene, Nick Srnicek and Alex Williams, distinguish between a contemporary radicalism that seeks the temporary, the local, the authentic—which they describe altogether as 'folk politics'—and a kind of radicalism that would focus more on strategy than tactics, and that would embrace rather than evade the contours of modernity, including bureaucratic rationality and efficiency.²⁴ 'We do not want to return to Fordism. There can be no return to Fordism', they write in '#Accelerate: Manifesto for an Accelerationist Politics'.²⁵ Neither do they approve of a fetishization of 'temporary autonomous zones' or the local, which might have certain tactical uses but which misunderstands the enemy.²⁶ In opposition to spontaneous leaderless movements such as Occupy, which fetishize authenticity and immediacy, they propose a high-tech form of counter-hegemony that would inhabit the structures and institutions of neoliberalism and break them through to the other side:

The tendencies towards folk politics—emphasizing the local and the authentic, the temporary and the spontaneous, the autonomous and the particular—are explicable as reactions against a recent history of defeats, of partial, ambivalent victories, and of surging global complexity. But they remain radically insufficient for achieving broader victories against a planetary capitalism. Rather than seeking temporary and local relief in the various bunkers of folk politics, we must today move beyond these limits.²⁷

Srnicek and Williams offer a provocative and salient critique of contemporary activist culture, and their discussion of the need to generate counter-hegemonic discourses is urgent and important, but the distinction they draw between the ‘folk-political’ and the modern is a false dichotomy. As I have sought to show, the folk and the machine are often one and the same; generating connections in and across distinct media including both high technology and the voice and body—away from the axioms of capital, towards solidarity, against fascism, with love, for noise—are the prime directives of this assemblage. Srnicek and Williams acknowledge the tactical potential of direct action and other ‘localist’ political forms, but suggest that they are currently ineffective towards the goal broader social transformation. (Interestingly, their rejection of ‘folk politics’ is also a rejection of the fetishization of tactics.) But who, for example, is to say that Occupy failed at this juncture? The connections and ‘temporary autonomous zones’ formed there are still burrowing, still feeding back, still gestating into bodies and machines.²⁸ As Walter Benjamin knew well, history does not move in a linear path, it piles up, waiting to be retrieved at decisive moments.²⁹

Reconsidering Authenticity

Despite the influential criticisms discussed above, there has been a push across a few disciplines to reconsider the critical valences of the idea, one of the most influential defenders of which has been the philosopher Charles Taylor.³⁰ Sidestepping the question of who might get to decide what authenticity would involve, Taylor argues that the project of authenticity is best approached as a centuries-long discussion about what it means to be ‘fully, really’ human (which is an always-moving target). Authenticity is a process and a struggle, and it involves asking critical questions about present ways of being.³¹ According to Taylor, we need to reconsider the rich dialectical history of the concept:

What we ought to be doing is fighting over the meaning of authenticity, and from the standpoint developed here, we ought to be trying to persuade people that self-fulfillment, so far from excluding unconditional relationships and moral demands beyond the self, actually requires these in some form. The struggle ought not to be over authenticity, for or against, but about it, defining its proper meaning. We ought to be trying to lift the culture [of authenticity] back up, closer to its motivating ideal.³²

Authenticity might involve any way of being, yet it is precisely the activity of collaboratively discussing and attempting authenticity in which Taylor is primarily interested. Taylor himself is perhaps too committed to holding onto the ‘rational’, discrete self, but, nonetheless, we could translate his argument onto a more rhizomatic ontology.³³ The ‘motivating ideal’ of authenticity described by Taylor might push us past the need to ‘fulfill’ individual selves as such.

But what versions of authenticity are we to suggest and fight for? There are dozens of options in the marketplace of ideas—some terrifying. One of the most promising and transversal can be found in Karl Marx’s writings, particularly in his *Economic and Philosophic Manuscripts*, in which he introduces the fascinatingly futuristic articulation of authenticity called ‘species-being’. ‘Species-being’, which Marx borrows from Feuerbach, is a dialectical version of authenticity; the power to transform is estranged from humans under capital, according to young Marx, but it is a power that persists, latent:

[T]he proposition that man’s species nature is estranged from him means that one man is estranged from the other, as each of them is from man’s essential nature. The estrangement of man, and in fact every relationship in which man stands to himself, is first realized and expressed in the relationship in which a man stands to other men.³⁴

Although Romanticism may have influenced Marx in his articulation of ‘species-being’, alienation and authenticity for Marx are strictly relational. Humans create themselves, their relationships, and their world, but they can create them in a myriad of ways. Under capitalism, however, where creativity is alienated, humans are not themselves. Under exploitative social relations, humanity is deprived of the ability to direct its own essence (the capability that is its ‘essence’).

In his recent writings on the concept, Nick Dyer-Witheford emphasizes this paradoxically unessential essence that is ‘species-being’: ‘In the Manuscripts, its discussion is cryptic, fugitive, tantalizing. It is, however, clear that Marx did not mean simply human existence as a biologically reproductive group. Species-being is rather the capacity to collectively transform this natural basis.’³⁵ Species-being thus has little to do with heroic individuals getting in touch with their inner natures. ‘To be authentic’, from this point of view, is to be against structures of power and domination that contradict or divert the creative energies of labour: ‘[Species-being] might really better termed “species-becoming”, the activity of a species whose only “essence”

is its historical plasticity. It has no eternal, universal content, but it is in opposition to both the laws of exchange and to instrumental efficiency.³⁶ In other words, the utopian dimension of 'species-being' points towards the reclamation of both 'the self'—considered inter-subjectively—and productive life, but this struggle takes place not apart from but rather within and along the media ecologies humans have made for and with themselves.

A similarly complex articulation of 'being/becoming real' can be gleaned from Michael Hardt and Antonio Negri's 'multitude', a rhizomatic assemblage of humans situated within but also against capitalist networks of expropriation and production: '[T]he plural multitude's productive, creative subjectivities [...] are in perpetual motion and they form constellations of singularities and events that impose continual global reconfigurations on the system.'³⁷ Their writings emphasize the immanent and vital energy of their political subject, but this is no national or natural *Volk*; they distinguish between the various levels of organization by which the multitude has been constructed and negotiated—in a manner recalling Benedict Anderson's suggestion that modern nation-states have been 'imagined'—and technology is a key component of these processes.³⁸ It is the convergence of the workers of the world with informational technologies that has calibrated and armed the multitude for conflict with its newest opponent, the imperial capitalist order: 'In the passage to the informational economy, the assembly line has been replaced by *the network* as the organizational model of production, transforming the forms of cooperation and communication within each productive site and among productive sites.'³⁹ The transition to immaterial labour as the paradigmatic sector of capitalist production has put creativity, communication, and knowledge at the centre of exploitation, which has been made possible by high-speed networks and digital media.⁴⁰ Yet, for Hardt and Negri this machinic territorialization has simultaneously planted the seeds of a mobile, 'hydra-headed', global smart mob of sorts.⁴¹ Recalling McLuhan, they describe tools as 'poietic prostheses'—integral components of our being and our creative capacities.⁴²

Shopping for 'authenticity', we might also have considered Paul Virilio's phenomenological approach to human techne, Hans Ulrich Gumbrecht's study of the production of presence, or recent engagements with Franz Fanon's critical race theory.⁴³ There are many options, some which hone in on affect and sensuality, others on political agency and recognition. The point is that radical critical theory has offered ideas that might help us to reimagine the possibilities of an authenticity that is always already embedded within media. Following Taylor, if theorizing authenticity is akin

to a big debate, however, with various participants putting forward varying articulations of what it might mean to be or to become real, the radical versions glossed above would seem to be drowned out by ‘authentic’ appeals to race, sex, and nation: the Brexit campaign in the UK, Maria Le Pen’s rising stardom in France, and Donald Trump’s victory on November 8, 2016 all point to the mass appeal of nationalistic and racialized conceptions of the authentic—not to mention, at least in the American example, farcically Romantic varieties of cool. Is not Donald Trump’s contempt for mass media, and his love for (‘direct’, ‘immediate’) Twitter, a grotesque descendent of Bob Dylan’s countercultural self-presentation in the documentary *Don’t Look Back*, wherein we see aged journalists continue to misunderstand the young folk singer and his generation? Thus, we need not only to theorize in rich and complicated ways the concept of authenticity—we also need to sell it, to shoot it, to sell it, or to sing it. Again, there are weapons to be assembled out of the long American folk revival’s tactical media toolbox.

Woody Guthrie and the Hootenanny

Woody Guthrie was born in Okemah, Oklahoma, in 1912, to a middle-class family that underwent severe hardships during Guthrie’s youth. Spurred on by the poverty of the Depression and by family misfortunes, Guthrie found his way to California in 1937, where he began his career as a radio broadcaster; a couple years later, he began his career as a writer, with a column ‘Woody Sez’ for *The Daily Worker*; and he eventually wrote for a variety of publications. Guthrie spent his most active years travelling the country, performing and writing both songs and fiction, and his life’s work intersects quite clearly with the other folk revivalists studied above: he worked for a time with Pete Seeger, Lee Hays, Millard Lampell, and others as a member of the Almanac Singers; he was championed by Alan Lomax, who recorded hours of Guthrie’s songs and oral histories for the Library of Congress; and his fictionalized autobiography, his songs and singing style, and his self-presentational strategies all had a marked effect on a young Bob Dylan and other young folk singers in the early 1960s.⁴⁴ Beyond those influences, Guthrie would go on to write some of the folk revival’s most far-reaching songs, including ‘So Long, It’s Been Good to Know You’ and ‘This Land Is Your Land’, the latter of which has continued to function as the United States’ ‘unofficial’ critical anthem even into the post-Trump era.⁴⁵

Taken later by Bob Dylan and other Greenwich Village players to embody the epitome of authenticity, Woody Guthrie’s image in popular culture—as

both a songwriter in particular and as a wandering hero in general—connotes rusticity and naivety.⁴⁶ As Hampton writes,

Guthrie's wild, rough-and-tumble, unkempt manner; his dusty, drab Okie attire; his weathered, crackling voice; his wry childlike sense of humor, coupled with his heartfelt dedication to and sense of oneness with 'his people', America's 'working folks', all merged to transform this wiry little drifter into a genuine folk hero, a symbol of the American working class.⁴⁷

As Hampton's glowing description above indicates, Guthrie's biographies render their subject in terms of grit and commitment. At an infamous audition with the Almanac Singers at the Rainbow Room at Rockefeller Center in New York City, for instance, he began to improvise verses, allegedly so uncomfortable by the scope and the scale of the wealth high above the 'real' New York City that he had to sabotage their performance. 'Well this Rainbow Room's a funny place to play / It's a long way's from here to th' U.S.A.', he sang, according to his own account in his pseudo-autobiographical novel *Bound for Glory*.⁴⁸ Guthrie also lived much of his life in relative poverty due at least in part to his own aversion to economic success, which is also the main focus of the filmic version of *Bound for Glory*, directed by Hal Foster. If any musician deserves the mantle of Romantic authenticity, it has been Guthrie. As Seeger put it, '[Woody] wasn't pretending to be anybody else—he was just himself.'⁴⁹ This image is complemented by Guthrie's writerly interests, often drawn to farmers and workers, to the plain-speaking and simple 'folk' that the Popular Front in the United States came to embrace in the mid to late 1930s.⁵⁰

Perhaps not surprisingly given this Romantic backdrop, Guthrie flirts with anti-modernist and anti-media dispositions in his writings. In his regular column for *People's World* in the late 1930s, for instance, he consistently articulates the integrity of work and the need for labourers to form organizations and bonds, including musicians, which could appear akin to contemporaneous critiques of mass culture: 'But electric fonagrafts an radeos an talkies has fixed it to where you put a nickel in an—one or 2 musicians entertains hunderds an thousands of people, an hole armies of well talented folks goes a beggin.'⁵¹ Yet, his distaste is not for mediation per se but for the particular structuration of talent (which is much more abundant than a star system would allow for) within American mass-media institutions. Guthrie's eye, in fact, was drawn to the hum and whir of machinery, including human collaborators, which is also evident in his letters and publications as well as in some of his songs. Modern media were not

just an inevitable feature of contemporary existence; they were crucial sites of ideological and aesthetic struggle, part of our very being.⁵² For instance, Guthrie suggests in a letter to his fellow Almanac Singers, that they allow the machine to infiltrate the content of their works:

This dont mean to complicate our music a tall, but simply to industrialize, and mechanize the words. Why should we waste our time trying to wind the calendar back? Our old standby songs were no doubt super stream lined when they first got out, and possibly that is the reason why they spread like a prarie fire.⁵³

Anticipating ‘accelerationist’ arguments, Guthrie wanted to avoid nostalgia of any kind, for he recognized the appeal in modern societies of novelty and speed: ‘super stream lined’ musical standbys ‘spread like a prarie fire’, and he wanted the same fate for their anti-capitalist ideological weaponry. The automatic and angular edifices of modern technology extend the worker’s hand and brain, and if the goal is to reach the proletarian, then one cannot ignore this crucial component of the larger organism. Thus, for instance, note the pleasure he often takes in the pronunciation of ‘elec-a-tric-i-ty’, or his ‘Car Song’, wherein his voice vrooms and zooms on the chorus, taking on the qualities of a motor.⁵⁴

As John S. Partington and Mark Allan Jackson have each observed, a significant event that modified Guthrie’s thoughts on the machine occurred when he was contracted to write songs about the Bonneville Power Administration, eventually collected as *Columbia River Collection*, which praised an organized and collective approach to modernization.⁵⁵ Yet, Guthrie’s machinism seems also to have been something he learned by doing. He wrote of his collaboration with Sophie Maslow’s New Dance Group, who wanted to use Guthrie’s music and other folk songs in their production of ‘Folksay’, which was to be performed by Guthrie himself during the live show. Guthrie recounts how organic (and unsteady) his own performance style had been: ‘People that sing folk songs never sing them twice alike. If you’re the same the weather’s different and if the weather is the same and even you’re the same, you breath different, and if you breathe the same you rest or pause different.’⁵⁶ This organic, ‘human’ sense of time and rhythm proved entirely unsuitable to the organization of collaborative production, for, although this impulsive approach would seem to be the epitome of (folk) authenticity, Guthrie’s organic folk approach led to disorganization and chaos: ‘I figured a dancer with any sense at all could make a few quick changes and invent a few steps if he had to in order to keep in step with my

singing. The dancers tried to do exactly this and they bumped and tromped on one another and flailed their fists and heads together [...].⁵⁷ Guthrie needed to lose his individual authenticity as a performer and join up with the total assemblage of production: 'I fell in love with two of the dancing girls just by the horse sense they used in explaining to me the business of organization. One girl told me the theatre was like a factory. The people are like the wheels. If they don't all turn the same time they'll tear each other up.'⁵⁸

Through the mediation of the phonograph, its steady machinations and reproducibility, Guthrie found the particular kind of discipline required of the collaborative project. He forced his voice and guitar to mimic and to copy the music, to embody mechanical reproducibility physically. In the process, he became no lifeless automaton; his delight in the dancers' bodies points not to a cold inhuman domination of human by machine, but to a thriving, muscular, desiring organization. 'Sophie's body looked so healthy and so active it looked like it would do almost anything she told it to do. All she had to do was to notify it.'⁵⁹ The kind of authenticity ultimately achieved, then, was not an individualized immediacy, but a structured, desiring, mediatized solidarity. As Garman observes, eros is often figured in Guthrie's writings as a political process,⁶⁰ but things seem complicated here by the machine: whereas the phonograph was a part of mass consumer society, yet waiting to be tactically appropriated, Guthrie also found that one could discover machines within oneself and within others. 'I learned a good lesson here in team work, cooperation, and also in union organization', he writes.⁶¹

Guthrie was not only influenced by preexistent modern machines; he also built some. While in the Merchant Marine, he built an imaginary medium that he called a 'wind machine', the purpose of which was to help his ship dodge torpedoes by delivering 'a flow of thermo-propulsion airwaves which pass over the ship's typography, creating an aerovacuum force behind the stern, which squeezes the ship forward, thus increasing its velocity'.⁶² In his journals, music itself takes the form of an impossible, imaginary medium: 'Music is the language of the mind that travels—that carries the pass key to the laws of time and space where distance is at least understood and visioning works with marvelous clearness'.⁶³ He even invents the word 'google' in his remarkable 'Folk Song', wherein he sings of the 'googling' and giggling of teacher and student, absurdly groping their way towards folkloristic knowledge.⁶⁴ The corporation name 'Google' is commonly thought to derive from the mathematical term 'googol', but Google co-founders Sergei Brin's and Larry Page's hegemonic search engine saw an early incarnation as the project

'BackRub'.⁶⁵ Guthrie's playful reconsideration of what constitutes an authentic folk song thus also stakes out the lustful, longing roots of the contemporary World Wide Web. Guthrie's most lasting and resonant medium, however, is perhaps his co-invented authenticity machine, the Hootenanny, to which we now turn.

The Hootenanny

The word 'Hootenanny' came to both Guthrie and Pete Seeger in the late 1930s, when the two were touring the country together, playing union rallies and anywhere else they could earn a few coins.⁶⁶ The trip is often cited as an important educational experience for Seeger, who was the younger and the more inexperienced of the two, but there was another important discovery to be made on this tour: in Seattle, they found themselves playing a monthly political fundraiser that their hosts called the 'Hootenanny'.⁶⁷ According to the *Oxford English Dictionary*, Hootenanny's pre-revival meaning was 'thingumajig' or 'gadget'—a playfully pragmatic catchall with technological connotations.

The connection of 'Hootenanny' with folk and left-wing musical expression was somewhat accidental, as we can perhaps imagine Guthrie and Seeger finding any number of other semi-archaic terms to employ, such as 'pod', which shares a similar etymology (see chapter 7). Nonetheless, the word soon became attached to parties and concerts held at the 'Almanac House' in Greenwich Village, New York City. The residents there, which included Guthrie and Seeger, began to hold 'Hootenannies' on Sundays when they were short on rent, and the events soon became popular, festive events where many notable folk singers and performers (such as Alan Lomax, Aunt Molly Jackson, and Lead Belly) dropped by on any given weekend.⁶⁸ The Almanac Singers who lived there were the mainstays; featuring a revolving membership that included Guthrie, Seeger, Sis Cunningham, Lee Hays, Gordon Friesen, and Millard Lampell, the Almanac Singers exemplified the turn to nativism in left-wing American cultural politics in the mid to late 1930s.⁶⁹ As Robert Cantwell describes their style: 'None was a trained singer. Accents, phrasing, vocal timbre, and range, all mixed, both among the singers and with each individually, with a disarmingly unprofessional heterogeneity that drew on a number of flatly incompatible traditions.'⁷⁰ The Almanac Singers' Hootenannies were embodiments and extensions of this eclectic, heterogeneous performance ideal. Folk singers, comedians, activists, and storytellers were all welcome, and the audience

too was expected to join in on the choruses or even take a turn leading the group.

We can take the Almanac-era utopian idea as a diagrammatic machine or 'gadget': knowledge and culture not as a point-to-multipoint transmission (which is the characteristic process of the mass-media industries, as the Almanacs themselves were well aware), but as a multipoint-to-multipoint interaction. In the liner notes to the Folkways record *Hootenanny at Carnegie Hall, Sing Out!* editor Irwin Silber lists essential features of the performance form: '(1) Audience participation; (2) Topicality; (3) Variety; (4) New performers; (5) The audience'.⁷¹ Silber's descriptive topography of the Hootenanny posits a diverse, collaborative, self-replicating structure ('authentic', but also sensitive to new historical events and new generations, as is evinced by 'topicality' and 'variety'). The Hootenanny was a distributed network that involved the dynamic circulation of knowledge and affect across audience members, performers, and songs.

The name itself was picked up as a generic buzz term at the height of the revival (ABC's folk-song show was titled *Hootenanny*, and a film entitled *Hootenanny A-Go-Go* starring Joan Rivers was even produced); but I am more interested in the originary ideal of the machine, which is largely lost to the media archaeologist, for these were ephemeral communication assemblages that came to be and then passed. We can return to Guthrie's writings, however, to shed more light on how these Hootenanny machines functioned exactly. Guthrie vividly represents the machinic character of group singing in his pseudo-autobiographical novel *Bound for Glory*, which he largely typed out at the Almanac House during the period that the Hootenannies were first held in New York.⁷² The novel is a *Kunstlerroman* of sorts about a folk singer who makes his way out of the Oklahoma dust bowl during the Depression, discovering the power of song in social struggle along the way. 'Good' communality is not simply distinguished from 'bad' structures of commerce or individuality, however, for Guthrie portrays a complex social and cultural battlefield. Across the opening pages, we see a violent and chaotic form of collectivity. Bodies and the train cars that carry them seem to mingle together, and yet the wanderers and ramblers have not found a connection: 'We looked like a gang of lost corpses heading back to the boneyard. Hot in the September heat, tired, mean and mad, cussing and sweating, raving and preaching. Part of us waved our hands in the cloud of dust and hollered out to the whole crowd'.⁷³ Guthrie vividly portrays a latent mass not yet sensitive to its collective potency and without a common language or channel. Hands wave into the dust and voices 'holler', useless, into the crowd; seeds scatter but none seem to find their way to fertile ground.

In a striking passage later in the book, we are offered a performance of collectivity, connectivity, and authenticity that sharply contrasts with this earlier representation of pre-political virtuality; the establishment of a common channel and code is the transformational catalyst. A group of anti-racists confronts thugs and tormenters by standing and singing together:

So as the last car of the train went on down the middle of the street,
everybody was singing like church bells ringing up and down the grand
canyon of the old Skid Row:

Just like
A treeeee
Standing by
The waterrr
We
Shall not
Be
Mooooooved!

The whole bunch of thugs made a big run at us sailing cuss words of a million filthy, low-down, ratty kind. Gritting their teeth and biting their cigar butts and frothing at the mouth. Everybody on our side kept singing. They made a dive to bust into our line. Everyone stood there singing as loud and as clear and as rough-sounding as a war factory hammering.⁷⁴

Thus, the machine that kills fascists is much more than the exterior instrument that is the acoustic guitar. Voices and bodies can meld and conjoin, too, forming a throbbing and propulsive ‘war machine’, a steely rhizome of sonic solidarity.⁷⁵

The performance of Guthrie’s ‘This Land is Your Land’ carries a similar affective weight. The chorus, which is about listening to others, is a ‘performative statement’ when sung by a mass of people—one hears and sings, and thereby propels into being, a collective voice.⁷⁶ Building on the work of Rick Altman, sound scholar James Lastra has suggested that there is no such thing as an ‘original’ sound, because sounds always also include the material in which they resonate (e.g. a room, an open space), and materials are always experienced differently depending on one’s perspective.⁷⁷ In other words, because we are all stuck in our own, individualized cages of

audition, there can be no ‘original’ sound to speak of, but only an endless variety of interpretations, of which sound *recordings* too can only ever be an interpretation or reading.⁷⁸ But Guthrie imagines a different kind of singing and hearing, whereby it is possible, if even for a moment, for everyone to hear and sing more or less the same thing. Sounds are indexical imprints in Guthrie’s utopian model of sending and receiving; they are circuits that can wrap together ‘a gang of lost corpses’ into a collective agent. It is the diagrammatic machine called the Hootenanny that makes real this ‘impossible’ way of hearing and singing.

The People’s Microphone

The vocal factory that Guthrie describes in his writings, and which he built in some of his songs and collaborative performances, was fired up once again in the fall of 2011, with the spread of the Occupy movement (‘We Shall Not Be Moved’ even made an appearance in Peter, Paul and Mary’s set at the New York City occupation). Edged on by knowledge of the revolts that made up the ‘Arab Spring’ and by the Canadian anti-consumerist magazine *Adbusters*, a group assembled in New York City on September 17 to protest Wall Street as the symbolic center of 21st century capitalism run amok. After being diverted by the NYPD to the privately owned Zuccotti Park, protesters set up camp, and news of the occupation began to spread via social networking sites, mobile phones, and word of mouth; soon, this brief intentional community began to erect makeshift institutions, including a library, health clinic, the famous ‘general assembly’, and a drum circle.⁷⁹ Within weeks, most of the United States’ major networks and newspapers were covering the occupation, which eventually began to spread across North America to other cities, even to London, Canada.

One aspect of Occupy Wall Street’s communicative structure that received media attention, and which particularly resonates with the folk revival, was the ‘People’s Microphone’.⁸⁰ A pragmatic response to restrictions on P.A. equipment in Zuccotti Park, the People’s Mic involved a group of people joining together to relay a message from one speaker to the surrounding audience. The closest audience members chanted a repetition of the message, which then echoed outwards to other circles, an active process that continued depending on the size of the group. According to Ryan Ruby, this performance of communicative solidarity marks a willful return to orality as famously explored by Walter Ong and Marshall McLuhan:

These are not merely strategic responses to a contingent situation (laws prohibiting amplified sound) or tactics retrofitted to a particular geography (NYC's financial district), they are indicative of developments in something much larger, the history of communication itself. The People's Mic and the Occupy hand signals will one day come to be regarded as paradigms of politics in a post-literate age.⁸¹

In addition to the People's Mic, Ruby lists SMS, Twitter, and live streaming as articulations of the integrated 'post-literate' paradigm of communication that Occupy embodies. Focusing on the experiential and sonic dimensions of the performance, Homa King has also explored the solidarity-engendering properties of the People's Microphone as a form of performative communication: 'Through collective speech, the people's mic shifts away from sovereign, solitary personhood.'⁸² In both Ruby's and King's analyses we see a latent nostalgia, perhaps, an eye towards the integrated and 'natural' experience of the chorus.

Moving away from questions of orality and literacy, and thus, in my view, more sensitive to the People's Mic's machinic diagrammatics, Marco Deseriis argues that 'social movements media [...] are so intertwined with the event that they break down traditional distinctions between action and representation, media production and media consumption, participation, and documentation'.⁸³ Deseriis also uses the People's Mic to rethink assumptions in media theory, arguing that 'the more media become integrated with the social fabric and the human body the more they become entangled with and dependent on the messages they convey'.⁸⁴ Deseriis thus renders an 'imaginary' authentic medium that is both situated within and pointing beyond conventional modelizations of communication, even in the field of media theory. Elaborating on Deseriis's argument, but in a way that also has Guthrie's Hootenanny in mind, I hear the People's Mic as an abstract machine that imagines a circuit in which endless circulation, contribution for contribution's sake, is not the telos of communication. So, in addition to the social dreaming that fruitfully emerged from the broader Occupy event, we can perhaps also see the emergence of a different way of conceiving of signs and signals, channels and faces. Whereas the 'endless loops' of 'communicative capitalism' echo upwards and away,⁸⁵ the transductive punch of the People's Mic rather moves across and *down*—into both the bodies and the throats of the nodes that must momentarily lend themselves to the distribution.⁸⁶

This reimagining of the relationships joining words, bodies, and social realities (which should also remind us of Woody Guthrie's vivid

portrayal of singing struggle) was also interestingly articulated on the 'We Are the 99 Percent' Tumblr blog. The site featured an almost endless array of photos of individuals holding handwritten signs explaining their particular situations. On 23 November 2011, for instance, an image was posted of a middle-aged man in glasses and black tee-shirt holding a sign that reads: 'I AM DISABLED AND LIVING ON SOCIAL SECURITY, FOOD STAMPS, and MEDICAID. I AM THE 99%'.⁸⁷ To date, 653 notes (i.e. 'likes', re-bloggings, and comments) have been posted in response to this single image. In these images of people *testifying* (via digitizations of their own writings and prints and profiles), and in the digital traces of all those who have 'liked' the testimonies, I see a productively utopian longing for a new relationship between messages and authentic subjects. Contra Derrida, the Occupy bloggers hold their signs, often staring directly at the camera almost like the Depression-era photographs for which Guthrie's songs were the soundtrack; they plead with us to read their writings as present inscriptions of the real. Dean draws on Žižek and Lacan to claim that digital comment culture suffers from a decline in 'symbolic efficiency',⁸⁸ but, on the Occupy Tumblr blog, signs and symbols enjoy a renewed capability. Occupy the signifier! On one hand, the site is indeed part of the fabric of endless circulation and a deflated symbolic efficiency; on the other, and at the same time, the images implore us to have faith that they are connected to something beyond other links or signifiers (that they are connected to desire and commonality, for instance). This is not a rejection of networking or of digitality per se,⁸⁹ but a living dream of a different way of being networked.

The Hootenanny seems to me to stand as one of the clearest ancestors of the People's Mic, though it has not been considered as such. Commentators have argued that the medium can be traced back to anti-nuclear protests in the 1980s and that it was notably used in the alter-globalization movement, and others have drawn connections between Occupy's General Assemblies and People's Microphones and older traditions such as the American town hall meeting or the religious ceremony.⁹⁰ But Guthrie's and the Almanac's Hootenannies, in which an old gadget could be put to work in the service of the fight for Communism and then against Fascism, seems a clearer contender in that the Hootenanny also vividly emphasized the imbrication of voices within distinctly mediatized ecologies. Thus, veteran Hootenanny singers found an easy audience at Occupy, including Pete Seeger, who sang 'The River That Runs Both Ways', perhaps a metaphor for machinic participation.

There is also an important way in which the People's Mic seems to diverge from Guthrie's machinic sing-alongs. The People's Mic is much more grounded than the Hootenanny had been in the liberal conception of free speech, and the latter more attuned to solidarity. As Deseriis's points out, the People's Mic 'allows all voices to be heard in the same way'—one must commit to relaying ideas and words with which one might disagree.⁹¹ The People's Mic thus has embedded in it a clear commitment to the principles of liberalism and free speech, the notion that every voice counts.⁹² Guthrie's and Seeger's Hootenanny, on the other hand, had built into it a filtering mechanism; as Seeger put it, '[The Hootenanny] was not a concert; it was not a community sing; it was not an amateur contest. It was a little of each all rolled together. A democratic-minded song session where racism would have no place [...]'.⁹³ There are some things that the Hootenanny was not meant to transmit, some instances wherein speech was not in fact free. This question of free speech is crucial—it is perhaps where the current resistance to the rise of fascism in the United States swings either back towards liberalism or forwards towards something else, a new kind of community. Thus, whereas the liberal People's Mic has been picked up again recently, by Elizabeth Warren, for instance, during the airport occupations in the wake of Trump's first wave of executive orders in late January 2017, we can see the Hootenanny not only there but also in the antifascist punch memes that went viral around this time (of which both liberals and conservatives were quite critical). Remixed GIFs and videos of a neo-Fascist having his voice physically if only momentarily silenced, his mouth stopped, connects indexically to resistant bodies speaking and acting together. In the reassembling of this clip to the accompaniment of dozens of songs, including Guthrie's 'Fascists Bound to Lose',⁹⁴ we perhaps see a veritable Hootenanny stretched and extended, taking a stand, insisting on solidarity.

6. American Folk Music as Strategic Media¹

'The story of American arts in the twenty-first century might be told in terms of the public reemergence of grassroots creativity as everyday people take advantage of new technologies that enable them to archive, annotate, appropriate, and recirculate media content. [...] [T]his creative revolution has so far culminated with the Web. [...] Once you have a reliable system of distribution, folk culture production begins to flourish again overnight.'

Henry Jenkins²

'The theatre where Justin [Bieber] had his first brush with stardom was relatively small and had limited seating. Consequently, when Justin sent sparks flying with his performance of '3 AM', a lot of his family and friends did not see it. That is when, in the spirit of sharing, Justin and his mother entered the YouTube age. [...] Justin has acknowledged, "I just did that for my family and friends", and that he was not expecting anything more to come of it.'

Marc Shapiro (from Justin Bieber: The Fever!)³

'Sing. Play. Create. Share. Let's make music social.'

Smule.com

Better World A-Comin'...Online

In his introduction to *Singing Out: An Oral History of America's Folk Music Revivals*, David Dunaway divides the history of folk music revivalism in the United States into three periods. His first wave links a wide range of collectors, researchers, and activists from ethnographers in the late 19th century to the more overtly political and propagandizing efforts of Alan Lomax and others in the 1930s and 1940s; next is the 'folk boom', which featured the mass-commercial success in the 1950s of the Weavers and then the Kingston Trio.⁴ Happily, the folk revival has returned again in a third wave, according to Dunaway, beginning in the late 1980s and early 1990s, and the World Wide Web has been a key source of the new varieties of folk expression recently on offer: 'They are pulling out songbooks or warped records from their parents' folk revival, learning to play an instrument or two, and then performing for their MySpace friends or the virtual audience [...].'⁵ Dunaway cites a Rolling

Stone article from 2007 that dubbed this the 'YouTube Folk Revival', which is defined by a reliance on networked personal computers: with guitar and social media in hand, anyone (at least anyone with a webcam, computer, and Internet connection) can interpret any song they like and contribute to an ongoing and apparently organic process.⁶

It is not only folk music fans who have been excited at one time or another by the possibilities of networked computers; scholars of media, especially during the boom of cyber-optimism in the 1990s, also tended to read folk tendencies into emergent 'new media' cultures.⁷ Whereas mass media had been alienating and isolating, and in some accounts pacifying, networked digital computers were going to take us back to the future, fostering new forms of community, participation, and creativity.⁸ Howard Rheingold's writings on the crystallization of early cyber-cultural community on various bulletin board systems constitute one clear digital-folk utopian rumbling.⁹ Manuel Castells's sociological studies of network culture are also influential in this regard, and he strongly distinguishes between the modern point-to-multipoint media age and the more collaborative and distributed cultural production made possible by the World Wide Web.¹⁰ More recently, Henry Jenkins has taken up the mantle of digital culture as vernacular culture, exploring in detail how communities and scenes can develop through the circulation and collaborative modification of digital texts and other documents. American culture in the 19th century was defined by 'the mixing, matching, and merging of folk traditions', and in the 20th century by 'the displacement of folk culture by mass media'; but the 'grassroots convergence' on the World Wide Web 'represents the folk process accelerated and expanded for the digital age'.¹¹ These optimistic narratives read like reverse-engineered versions of the earlier, nostalgic folk writings. Whereas Cecil Sharp and F.R. Leavis, for example, longed for a pre-modern past in which culture was actively made and shared, digital folk utopianism suggests that we are now finally able to rebuild such a situation with networked personal computers.

Of course, numerous critical media scholars have more recently taken issue with this variety of digital utopianism, pointing to the dark underbellies of our shiny participatory gardens and the ways in which our 'folk freedom' online is corralled and exploited—or the ways in which it distracts us from the exploitation of others. For instance, drawing on Gilles Deleuze's extension of Foucault, Alexander Galloway proposes that digital communication brings into being new, deeper, networks of control and containment, which necessarily include the rules of connection and exchange: in a word, 'protocol'.¹² Others have taken a more political-economic approach, taking on

digital mythologies by examining the ways in which online play and digital creativity constitutes new and deeper forms of alienation and exploitation.¹³ There is also a growing literature on the environmental and human costs of our global chains of digital media production and waste processes.¹⁴

The current chapter contributes to the critical literature on networked cultures by exploring some strategic manifestations of the ‘YouTube Folk Revival’, paying particular attention to the production therein of communication diagrams. American folk revivalism, as I have been exploring it, variously emphasizes the body and flesh, solidarity and time, noise and machines, but here I want to examine how ‘folk media’ have also been deployed strategically within smoother, more spectacular spaces. Tactical media theory has, I hope, helped us better to appreciate some of the under-acknowledged complexities of the American folk revival; in this chapter, it is tactical media’s big Other, strategic media, that will help us to dig further into this medial-discursive object. As de Certeau defined it,

I call a “strategy” the calculus of force-relationships which becomes possible when a subject of will and power (a proprietor, an enterprise, a city, a scientific institution) can be isolated from an “environment”. A strategy assumes a place that can be circumscribed as proper (proper) and thus serve as the basis for generating relations with an exterior distinct from it.¹⁵

In what ways has the concept of ‘the folk’ been used as a (relatively) stable place from which to work in digital networked spaces? An important aspect of war theory at least since Clausewitz has been to know your enemy, and in this chapter we will look at three: ‘YouTube Folk Revival’ alum Justin Bieber; the developer Smule’s line of music-making smartphone apps; and the exemplary ‘axe’ of this scene, the iPod.

‘Baby, Baby, Baby’

YouTube is indeed a vehicle for some kind of ‘folk’ process. Songs (among many other kinds of texts) can be shared, reinterpreted, recorded, and shared again—the emphasis here not necessarily on profits (never mind YouTube’s own business model), but on participation. It is as though the song-swapping rituals in Washington Square Park on Sunday afternoons, a tradition that began in the 1940s and continued into the 1960s and even to this day,¹⁶ has been merely stretched across a wider territory. Whereas

folkniks would gather to sing and to share simultaneously in a particular urban space, and to encourage each other politely, singers now gather asynchronously online, offering likes, comments, and maybe even sharing others' contributions in their own feeds.

As Pete Seeger knew well, however, Washington Square Park is not Carnegie Hall; each venue affords its own distinct opportunities. What kind of folk medium, then, is this? In the molar spaces of YouTube, there are particular ways of ordering the folk encounter; views and 'like' tabulations, and the possibility of generating advertising revenue and sponsorships, are central organizing structures, no matter what song you are singing. The game of the 'YouTube Folk Revival' as currently played seems to throw up a tiny node and derive pleasure from its growth potential, to become an 'entrepreneurial vlogger', as Jean Burgess and Joshua Green have defined it.¹⁷

Some are better at this game than others. One of the best to date hails from Stratford, Ontario. Young Justin Bieber had clearly virtuosic musical powers, and he was encouraged by his single mother to play with and on a variety of instruments from an early age, including drums and guitar, and to sing. By his tween-age years Bieber was already hitting the busking spots of Stratford, a popular tourist town thanks to a local Shakespeare festival, and, in early 2007, it occurred to Bieber's mother that they might also share his performances online, in particular his performance in a local talent contest. As she tells it, the messages were not intended for his future fans in waiting—only intended for family members.¹⁸ 'I just did that for my family and friends', Bieber himself would later recall.¹⁹ As Derrida has pointed out, however, media are leaky.²⁰ One important auditing voyeur here was Scot 'Scooter' Braun, an aspiring music producer who soon wooed Bieber and his mother, introducing them to big players in the music industry in Atlanta, and ultimately launched his eventual career not just as a mega pop star but as one of the strongest nodes on the Internet.²¹

Bieber's star discourse rightfully claims the performer as the first YouTube star to cross over into mainstream success, which has lent his image and voice a distinctly distributed authenticity unlike that of other pop stars; whereas individual origins and the 'will-to-truth' are crucial in film and popular music stardom,²² Bieber's star narrative equally emphasizes his imbrication within a network. Bieber did not seem to be a product of the culture industry, trimmed and trained and packaged for mass consumption; Bieber appeared an infiltration of that very industry by a collective group of fans who, in essence, co-created, if not his talent and music, at least his visibility and success, work that was done not in a local subculture but online. The star often acknowledges this persistent indebtedness.²³ Bieber's

star texts thus often begin, not with details of the Canadian hinterland out of which he emerged, but with the Internet (and, when Canada or Stratford are mentioned, it seems mainly to prove the all-encompassing reach of the network, 'Canada' signifying here a limit case of reachability). The 2011 concert documentary *Justin Bieber: Never Say Never*, for instance, begins with a rolling screen shot of someone opening her morning emails, clicking on various fun online videos in succession: 'The Sneezing Baby Panda', 'Twin Boys Laughing at Each Other', etc. We move from email to YouTube and back again, finally reaching 'no words, just watch' and a link that leads to 'With You – Chris Brown Cover – Justin singing'. A cute, emotive kid with a charismatic voice sings on a couch in a grainy, shaky video clip – suddenly we cut to stadium concert footage of that young singing YouTuber playing now to thousands, moving like a consummate pro, in costume. The high-fidelity concert film contrasts sharply with the pixelated YouTube video (which was shared and accessed by users); the affective energy of sharing, writing, linking, and clicking is thus 'remediated' before our eyes, legitimated and rebroadcasted. The virtuosic singer onstage clearly displays charisma and talent (this is, in some ways, a continuation of the entertainment industry's old story of 'discovery' and natural charisma), but the sheen itself is something on which many, maybe including the current viewer, have collaborated, which seems part of the pleasure of this 'text'.

This theme of scaling up is a constant in his early records and videos. 'Legitimate' mass-mediation is foregrounded, an attention to the 'quality' of professional production that has almost an estranging effect. For instance, the first music video of Bieber, the first YouTube star, is not grainy video at all but a cinematic blockbuster. High-keyed lighting, choreographed dance routines, and celebrity cameos intertwine to clarify the distance that little Justin has covered since his YouTube debut. Success is always a part of the star image, but here it seems somewhat different, as though we had been part of this leveling up of scale. Bieber seems even to shrug at times in this video, amazed that this voice and body had been first on a street corner, then on a social network, and now – thanks to 'the fans' – in a major production with Drake and Ludacris as guest stars.

A name has been given for the kind of devotion and intensity required of his networked nodes: #Beliebing. To Belieb is not to know – it is not even to believe – it is to love and to participate in branded community. There is no exterior about which to know, however, but only forces and possibilities. Bieber got into hot water when, on tour in Amsterdam in 2013, he claimed that Anne Frank would have been a #Belieber, which justifiably struck many as an insensitive and narcissistic claim, but would Anne Frank have

been a #Belieber? One cannot know for sure – one can only #Belieb. This is the confidence of the strategic network, coordinating the distributed systems that cut across it, '[serving] as the basis for generating relations with an exterior distinct from it'.²⁴ Things are more complicated within this topology than within De Certeau's urban spaces, for the 'subject of will and power' is now fully immersed within the environment in which she acts, acting immanently within the relationships it generates.²⁵ Still, branding presupposes an at least theoretical exterior, an outside or horizon, which it is a goal to reach and to colonize.

Whereas some stars' trademarks are their voice (Tom Waits), or their movement (Michael Jackson), or their songwriting abilities (Bob Dylan), Bieber's is perhaps his monstrous network power. Although many of his tech startup investments have been kept secret, his high-profile entrepreneurial activity has sought both to capitalize on and to extend this asset. A 2012 *Forbes* article entitled 'Justin Bieber, Venture Capitalist' claims that at least four such investments to date are Tynychat, Stamped, Sojo Studios, and Spotify, and, since then, he has invested in Shots, a selfie app company that has more recently shifted more towards Internet star content management.²⁶ The fact that most of Bieber's investments have not been disclosed is a wise move, for he can organically integrate these brands into his massive assemblage of sharing and liking and contributing, goodwill and gifting remaining important. For instance, when Bieber lent his face and network to a Carly Rae Repson single, 'I Really Like You', it was not often mentioned that his manager 'Scooter' also had a stake in Repson (perhaps Bieber did as well?). 'Carly Rae Jepsen's new single "I Really Like You" soars into the top 40 on the Billboard Hot 100 (dated May 2) thanks to some help from her pal Justin Bieber', *Billboard* put it.²⁷

Bieber's career, it seems to me, can be divided into three main moments or stages: breakout YouTube teen sensation (2008–2010), misbehaving star 'bad' boy (2011–2014), and cool digital mash-up (2015–present). The middle period seemed to look more to earlier star narratives for inspiration, attempting to generate an 'authenticity' centred around masculinity and sexuality; but the current (2015–present) modular Bieber is a fascinating rearticulation of the YouTube folk star, which emphasizes Bieber's individuality and creativity even though his most recent musical work also explicitly foregrounds the machinic and networked status of his sound recordings. For example, in an interview with *The New York Times*, Bieber and collaborators Diplo and Skrillex explain the working process that led to their hit single, 'Where Are U Now?'. Bieber sent the two digital music-makers an a cappella version of his vocals and a piano of the song

(co-written by Bieber and Jason Boyd), initially a slow contemplative performance; the two then took this raw material and transformed it, using sequencers and other modularizing tools, into looping and digitally distorted up-tempo dance number. To that effect, Skrillex offers his post-humanist thoughts on the body as an instrument in *The New York Times* interview feature:

The voice and mouth [...] and your whole skull structure [...] is like a synthesizer, like an organic synthesizer. You know, you have your vocal chords, which create a vibration, and it travels up through the rest of your face and the roof of your mouth and bounces off, depending on how you open your mouth, and those are just changing, shifting the frequencies.²⁸

This *New York Times* feature is fascinating for the ways in which Bieber himself simultaneously informs us that the glitched-out digital distorted fragments that sparsely litter the recording are Bieber's voice, which is not a synthesizer, but an interface to a deep soul. 'Now, being twenty-one, and going through some hardships, you can hear that in my vocals, and through the emotion of my voice', Bieber confesses.²⁹ The current, hyper-digital direction of his music is recalibrated as the sincere channel for a sensitive soul.

'There is no software', according to Friedrich Kittler,³⁰ but Bieber's star organism harnesses hardware, software, and the folk-social network that got him there. The video for 'Where Are U Now?' exemplifies this action. The initial tracking shot takes us into a clean gallery space, empty except for the multitude of artworks currently mounted, each one the same: a photographic portrait of Bieber. We zoom into one, where Bieber appears to sing, in shadowy silhouette, as the moody ethereal intro verse unfolds. When we reach a key line – 'Where are you now, when I need you?' – we are then dazzled by a stroboscopic cascade of drawings, done by (apparent) fans themselves, superimposed on top of Bieber's moving and singing body. The remainder of the video moves back and forth between the gallery – where a drawing jam happens in time-lapse, creative participants mixing paints and testing pencils, working directly on top of the screens arrayed through the gallery's walls – and Bieber, dancing, singing, moving, the fans' drawings superimposed as a collaborative palimpsest of star and fan labour. Here again is a concise diagram of the folk revival as strategic media: the diverse creative activities of a network directed and harnessed by a convergent, coordinating star who stands (or dances) in the centre.

SMULE

The YouTube Folk Revival is not only a star machine – anyone can join the process. In order to assemble some instruments and tools for would-be digital folk, Jeff Smith and Dr. Ge Wang founded the mobile apps developer Smule in 2008, and their objectives hearken back to the participatory and DIY ethos of the long American folk revival. According to the company's homepage:

Smule's mission is to connect the world through music. With the premise that everyone is creative, Smule uses the magic of technology to liberate the expressive musician in everyone. Smule's award-winning applications include Magic Piano™, I Am T-Pain™, and Ocarina.³¹

Anyone can sing or play music. At least, we should all try. Indeed, with Smule software and iPhone in hand, many have done just that, for, as of January 2013, Smule claimed to have 15 million active users.³² The revival's mimeographed publications such as *Sing Out!* and *Broadside* tried to make folk knowledge accessible (the magazines offered sparse chord charts for the most recent batch of topical songs, and often published the compositions of amateurs and unknowns), but Smule goes one step further by eliminating technique insofar as it is possible to do so without compromising the feelings of expressivity and virtuosity that can come from playing music. As Anthony Ha has described Wang's vision: 'When someone opens a Smule app, he says they shouldn't ask themselves, "Am I a musician?" because the answer is usually no. Instead, the goal is to draw people in, then by the time they realise they're making music, "it's too late – they're already having fun."³³

Indeed, their programmes are responsive and intuitive. The *Ocarina* and *Ocarina 2* apps turn your phone into something akin to a mediaeval pipe. The user blows into the microphone, directing the pitch by pressing various combinations of fingerings on a four-button touchpad. *Magic Piano* works similarly but with obvious differences in sound samples and interface. The user touches falling notes on the screen (a cascading visual which matches the song's rhythm, not unlike musical games such as *Guitar Hero* or *Rock Band*) to recreate the central melodies of well-known hits. *Sing!* harnesses the voice, allowing you to sing along to contemporary chart-toppers, pop and rock classics, and even public-domain 'folk' songs. Traditional numbers such as 'Twinkle Twinkle Little Star' are free, but you need to pay to participate in the folk process of material such as Justin Bieber's 'Girlfriend'.

The clear expressivity of Smule apps hearkens back to certain aspects of the folk revival, but so too does the machine-like quality of some of the programmes. *IAMTPAIN*, *Songify*, and *Autorap* all deploy the encoding device 'Autotune', which has increasingly been used since the late 1990s to foreground the digital ground of contemporary popular music.³⁴ Users can record observational monologue or improvisational singing (you could even recite Guthrie lyrics), and *IAMTPAIN*, *Songify*, or *Autorap* will carve up and manipulate the recorded speech or song into rhythmically and harmonically pleasing (and often humorous) music, foregrounding the computational motor of the process. A new app called *Mad Pad* even blends this recombinant mash-up aesthetic with the art of field recording as pioneered by Alan Lomax: 'Remix your life with MadPad! Turn everyday sights and sounds like your car, an empty soda can, or your friends into the ultimate percussive instrument. Who would have thought everyday life could be so musical?'³⁵ Field recordings become samples to be remixed at the discretion of the folklorist-cum-deejay.

In addition to sound and feel, though, a key connection between the Hootenannies and Smule apps are the latter's various sharing functions. Ocarina allows you to drop in on anyone on the planet currently logged in and jamming in real time. You are given a visualization of their current location, and also the opportunity to 'love' their performance, which is as easy as clicking on a heart-shaped icon. The accumulated total of 'love' is then tabulated and displayed. On the theme of 'social' music, Wang boasts of the revolutionary potentialities of his instrument:

We use location to geo-tag people who have recently played the Ocarina; we can actually send that anonymously to the Smule cloud, as it were, and it's the first instrument that we know of in history that allows its players to hear one another from around the world. ... We believe this is just the beginning of a new revolution, where people will relate to one another differently and people will express themselves differently, all facilitated by what we can do on this device.³⁶

More recently, Smule apps do not just allow you to toot your own horn or merely to admire the tooting of others; you can now play with other anonymous users through collaborative cloud networks. *Sing Karaoke*, for instance, allows multiple vocalists each to contribute a line or even just a phrase to their favourite tune, and the collaborative product can then be enjoyed and shared by all. On Smule's Facebook page, where an enthusiastic virtual community gathers to like and to respond to recent promotions and

contests, users have shared and commented on *Sing!* recordings featuring up to 20 collaborators. Each individual contribution recorded on the way to work, perhaps, in bedrooms, at recess: 'All around me, [voices] sounding.'

As we have begun to see, there are obvious echoes of the Hootenanny in the music-making mobile software of Smule, but Pete Seeger's observation, 'our planet is full of singing people', was, for Seeger, an implicitly political remark.³⁷ To reclaim individual and collective voices would be to reject the 'phoniness' churned out by the military-industrial-entertainment complex. Smule apps might seem to rekindle the promise of the original Hootenannies, at which distinctions between observer and participant were cast off, but we will now consider a few different ways in which Smule apps are an effect rather than a revolutionary cause – an articulation of a relatively new form of work, and of the degradation of political culture, in the era of 'cognitive' capitalism.

Composition or Repetition?

In his book *Noise*, political economist Jacques Attali explores the overdetermined relationship between our historical understandings of music and noise, on one hand, and social and economic change and revolution, on the other. Music, for Attali, is not just a reflection of particular socioeconomic forces, though it is, in some senses, that as well; music, as well as that which a musical culture excludes as noise, also signals new social potentialities.³⁸ The emergent bourgeois notion of the hermetically sealed work helped to prepare the ground from which the ancient regime would eventually be toppled.³⁹ The 'stockpiling' of labour time in the twentieth century, which is how Attali figures sound recording, pushed capital towards new horizons of surveillance and commodification.⁴⁰ The concluding and ambiguously utopian chapter explores what Attali terms the age of 'composition', which he describes as:

Doing solely for the sake of doing, without trying artificially to recreate the old codes in order to reinsert communication into them. Inventing new codes, inventing the message at the same time as the language. Playing for one's own pleasure, which alone can create the conditions for new communication.⁴¹

We might be reminded of Smule apps and the 'YouTube folk revival' in general when we read Attali's utopian prognosis. Although self-branding and promotional culture pervade social networking sites and platforms

like Facebook, Twitter, LinkedIn, or Academia.edu,⁴² many of Smule's virtual communities seem to be forums of anonymous folk creation. Faceless flutists and singers going by the names of prem, fatsausage, pimpflute, Link, (anonymous), montreal, Marco, Emelie, PBMike15, sword, Thanatos, unicorngiggle, RIPLeRoiMoore, and PressTheHeart are just a few of the nodes that cut across this rhizome. They do not seem to be playing for recognition, but because they enjoy being creative for its own sake, or 'doing for the sake of doing.'

The hardware underneath the magical music-making Ocarina and its phylum-mates is ready for more than 'composition': iPhones are only ever a swipe or a click away from becoming once again the tethering gateways to a 24/7 'immaterial' workplace, as some neo-Marxist scholars have described it.⁴³ As the modern disciplinary boundaries between factory and home, public and private erode, exploitation reaches beyond the assembly line to subsume virtually all corners of social life.⁴⁴ Franco 'Bifo' Berardi has aptly described this confluence of exploitation and creativity with his term 'cognitariat',⁴⁵ and mobile communications are important vectors across which cognitariat subjects generate and share the affects and knowledges captured by cognitive capitalism:

Labor is the cellular activity where the network activates an endless recombination. Cellular phones are the instruments making this recombination possible. Every info-worker has the capacity to elaborate a specific semiotic segment that must meet and match innumerable other semiotic fragments in order to compose the frame of a combinatory entity that is info-commodity, Semiocapital.⁴⁶

From this angle, Smule apps appear as merely the folksy mask of the larger mobile interface keeping us in constant contact to the endless streams of data many are required to sort through in order to be valuable contributors to the informational labour market.⁴⁷ Guthrie's machine killed fascists, and Seeger's machine surrounded hate and forced it to surrender. Now the mobile, individualized pods carrying *Ocarina* and *Sing!* circulate value-generating affects, symbols, codes, and communication.

These instruments are not only happy distractions to keep flexible immaterial labourers amused in between calls or jobs. Like many applications and platforms that make up Web 2.0, Smule apps can also be considered as sites of value extraction. As Christian Fuchs puts it, '[c]apitalist produsage is an extreme form of exploitation of labour that the producers perform completely for free',⁴⁸ and the uncountable hours anonymous users have

spent building and sustaining Smule's network would be an example of the 'produser' exploitation Fuchs describes.⁴⁹ As the Smule privacy agreement makes plain:

Smule shares demographic, profile and other general information about you and our other customers with our partners on an aggregate basis. This means that we tell our advertisers general information about the characteristics of our customer base. [...] Smule may share your unique device ID with advertisers or your location (based on opt-in location-based services, which rely upon a device's GPS coordinates).⁵⁰

Smule apps are part of the broader cultural industry of social networking, where creativity, communication, and collaboration are all surveyed and mined for aggregate data. The song collectors John and Alan Lomax shared in Leadbelly's copyrights, and took two thirds of his haul at concerts.⁵¹ Thus, Smule participates in a long tradition of American song collectors' exploitation of the folk.

The Politics of the Chorus

We could say that the Almanacs' Hootenannies actually anticipated the contemporary 'prosumer': the audience was expected both to pay and to sing along, to plug into a participatory network and to derive pleasure both from the network itself and from its own contribution. Again, both the Hootenanny and the iPod share similar etymologies, but clearer differences emerge when we go back to the idea of singing as a diagrammatic machine, for the Hootenanny and Smule apps constitute materializations of very different utopian visions.

In *Democracy and Other Neoliberal Fantasies*, Jodi Dean describes 'communicative capitalism' as 'the materialization of ideals of inclusion and participation in information, entertainment, and communication technologies in ways that capture resistance and intensify global capitalism'.⁵² Of particular interest is Dean's discussion of technological fetishism and the transition of communication from the sending of messages (with destinations) to the endless circulation of 'contributions'.⁵³ Political action is as easy as pointing and clicking, liking and sharing, but these activities are harnessed by capital and, in turn, reconsolidate the grip of neoliberal policies, according to Dean's analysis. As Geert Lovink more simply puts it in his similarly sobering account of social media: 'When everyone broadcasts, no one is listening'.⁵⁴

Eavesdropping on a live jam by an Ocarina user nicely highlights some of the claims Dean makes. We are confronted with a clean, pixelated image of planet Earth. Glowing in the background are all the other active users, tiny dots scattered across the planet; we audition one performer at a time, whose live musical expressions are visualized as waving streams (think *Ghostbusters*) shot straight out through the atmosphere and into space. Yet, the colourful stream of 'social' music emitted by each *Ocarina* player is not intended for the other nodes in this strangely solipsistic network, it seems, or even for the eavesdropper. (*Ocarina 2* has removed the other nodes from view entirely.) Its target is the process of contributing as such, and in the visual representation of this folk machine we see the peculiar synthesis that is networked communication and narcissistic individualism. 'All around me, voices sounding / Away from each other / Directly up into outer space!' Ocarina players are hyper-connected to an online community boasting 15 million users: a virtual Hootenanny to end all Hootenannies. But it is not possible for their broadcasts to take root, which is the ideal end of the folk process, according to Seeger and Guthrie. It is not possible for their broadcasts to be translated into other forms of embodied solidarity, which the programme itself fascinatingly narrates. Ocarina players' contributions are by and for the medium – folk songs by and for spectacle.

This Machine Orders Stuff on Amazon

Woody Guthrie's primary machine was an acoustic guitar (one that famously had 'This Machine Kills Fascists' scrawled across it), and Pete Seeger's was a banjo (his gentler instrument read 'This Machine Surrounds Hate and Forces It to Surrender'), but, as a whole, the folk revival's performers utilized a range of instruments: autoharps and fiddles, kazoos and washtubs, harmonicas and even the Fender Stratocaster – the revival tout court was a curiosity cabinet of striking old sounds and weird new networks.⁵⁵ What about strategic folk media? Smule apps are available for download on the Apple App Store and via Google Play, but the demonstration videos on Smule.com features an iPhone, 'perhaps the apotheosis of the smartphone phenomenon', according to media scholar James Miller.⁵⁶ Although there was brief comment made via Bieber's Instagram account that the Android device may make better images than the iPhone,⁵⁷ Bieber would seem to prefer the iPhone as well – tweeting out in September of 2014, for instance, that the app in which he had invested, Shots, 'looks amazing on the new iPhone 6 Plus', also posting photos of himself using the gadget (which he had apparently acquired ahead of the release date).

Bieber's love for the Apple version of the ubiquitous smartphone entered more fleshy territories when, after scolding a New Jersey audience for throwing things on stage during his concert performance, he reacted by picking up one of the items – an iPhone – and shoving it down his pants.⁵⁸ Bieber, as star and singer, relies, of course, on a complex and multifaceted network of sound recording, video, and marketing techniques and technologies; but the discrete iPhone through which he communicates with his fans, and through which they communicate with him and Belieb in him, is perhaps now the exemplary instrument of the 'YouTube Folk Revival' out of which he got his start.

In his thoughtful article 'The Mobile Device: A New Folk Instrument?', Steve Jones searches but ultimately answers in the affirmative, focusing in particular on the through-line of mobility joining these musical phyla.⁵⁹ Indeed, Guthrie's *Bound for Glory* chronicles an aimless guitar-toting migrant sailing the railways and cityscapes of the United States during the Depression, and the smartphone too is part of a long history of mobile sound experience.⁶⁰ We could think too of the rhetoric surrounding the Arab Spring, and the subsequent occupations in 2011, and the foregrounding of militancy and politicized activism sparked with (if not actually by) mobile digital communication technologies.⁶¹ However, whereas the folk revival occupied a terrain in which distinct media still occupied spaces and temporalities, the 'YouTube Folk Revival' looks rather to mediatizing master channels.⁶² As James Miller describes it, 'The smartphone has similarities with personal predecessors (music devices, so-called feature phones), while its distinctiveness lies in its capacity to engage, in a variety of ways, with the larger multimedia networked world.'⁶³ The post-media status of the iPhone was a feature from its first round of commercials, in which malleability and a modularity of functionality was the foregrounded feature. 'This is how you turn it on. This is your music. This is your email. This is the web. And this is a call [...] on your iPhone', said a narrator as a pair of hands guide us through the device.⁶⁴ Whereas a kazoo is a kazoo and a washtub is a washtub, the digital smartphone is all of these things, including finished recordings such as Bob Dylan's 'Like a Rolling Stone', the track Steve Jobs chose to briefly play while demonstrating the device at the initial shareholders demonstration in 2007.

One crucial 'personal predecessor' of the iPhone is Apple's iPod. According to Michael Bull's masterful study, the iPod itself is part of a long history of the privatization of space and sound, but the iPod is a novel articulation of this bourgeois phenomenon in that it allows a mobile defense mechanism against the 'chilliness' of alienating urban spaces, which is the 'warmth' of our networked connections and the modular sonic bubble that follows our movement.⁶⁵ The iPod's famous silhouette ad campaign vividly articulated

the pleasurable dimension of this new device and socioeconomic landscape.⁶⁶ Enveloped by their devices, of which they were in clear control, anonymous dancers moved to the rhythms of their playlists, ‘alone together’.⁶⁷

The folk revival’s emphasis on machinic communality and solidarity would seem to be the antithesis of the place-less spaces occupied by bubble-encased iPod (and now iPhone) users. Indeed, my tactical-media folk revival is quite far from the Apple Store. Yet, on two significant occasions, the long folk revival has played a small role in the branding of Apple’s iPod (a brand image that persists in understandings of the iPhone). First, Bob Dylan, after having returned to ‘roots’ and acoustic music in the early 1990s, appeared in a commercial for the device in 2006, and the ad is a fascinating transmogrification of the intimate folk/country performance ideal.⁶⁸ We begin with a shot of Dylan’s hands and guitar strumming, then cut to a medium shot of him singing ‘Someday Baby’ (from his then-new record *Modern Times*) into a microphone. We then see the trademark silhouette dancer, holding an iPod, dancing in time to Dylan’s number, but we never see addressee and addresser in the same frame. The white barrenness of the background announces a new performance architecture, for space and time here are colonized finally by the ultimate command and control servomechanism.

‘The folk’ was called upon again for an iPod Nano advertisement featuring the singer-songwriter Feist. Though she had come out of an indie-rock scene (having played in the Toronto-based collective Broken Social Scene and By Divine Right), Feist had also engaged with the aesthetic and phonographic strategies of the revival both in her music and performances and in interviews. As she described her tastes in a CBC broadcast,

I just keep listening to the *American Anthology of Folk Music* over and over, really, that’s pretty much it. But when I need a break from that I’m drawn to field recordings from around the world – like there are libraries of these things in different cities. And I can just sit down and listen to field recordings of music that’s absolutely gorgeous, recorded without any self-consciousness, by people who don’t sing for any other reason than they just feel the need to do so; maybe because they don’t have much else, or for any other reason. You can hear their clothes batting in the wind in the background, all these people who live subsistence lives in rural areas in Africa, Asia, South America, who just sing purely for the joy of it. And it’s so beautiful.⁶⁹

Her breakout album *The Reminder*, recorded in a Parisian home, embodied the casual, low-fi folk aesthetic pioneered by Alan Lomax and his father

to whom she alludes above. The track 'The Park', for instance, features environmental noise (birds, trees) alongside the slow, rough acoustic performance. Folk gatekeepers took notice – Feist was included, alongside Arlo Guthrie and Joan Baez, in the Annie Leibowitz *Vanity Fair* spread entitled 'Folk Heroes', which promised to document 'a folk revival brewing'.⁷⁰ The 'folk' qualities and DIY minimalism were also evident in Feist's breakout video, '1, 2, 3, 4', which was featured in an iPod Nano advertisement. Made up of a single long shot, perhaps the filmic equivalent of a phonographic field recording, '1, 2, 3, 4' appears to give us direct, intimate access to the body and the voice of the performer. Just as the filmic apparatus does not get in the way of the long shot – or so many have believed, since André Bazin – neither will our iPod (whichever colour we might choose). Thus, as we saw above in Apple/Jobs discourse, despite the field's subterranean discourse on media, the revival is again calibrated as Romantic reification.

Yet, there is an alternative pathway running from American folk to mobile, participatory media: the Hootenanny and the Apple iPod (which the iPhone and many other smart phone devices remediate in part) actually share etymological roots. According to Apple folklore, the 'pod' in 'iPod' was inspired by Stanley Kubrick's *2001: A Space Odyssey* (which, in its time, also expressed an anti-IBM theme). However, according to the *Oxford English Dictionary*, one of pod's archaic meanings is 'the socket of a brace into which the end of a bit is inserted'. Fascinatingly, Gordon Friesen's recollection of the original usage of 'Hootenanny' points in a similar direction:

Hootenanny had been in use in rural America from way back to designate something you didn't know the exact name of. Say, for example, a couple of farm boys in Oklahoma might be overhauling a 'T-bone Ford' out behind the barn with pieces spread all around, and in fitting them back together one might say to the other, 'that thing-a-ma-jig goes here and that hootenanny goes there'.⁷¹

Thus, if you dig far enough, the Hootenanny, a down-home channel of convergence, and our individualizing mobile media occupy similar media-discursive spaces. As we move forward with our various musical, political, hacktivist, and other tactical projects, then, though we need not cut the cord, we may wish to insist and to reclaim social media along its originary lines. 'wePod' is less elegant and probably less marketable, but what about 'iHootenanny'? What might it look like and where would it take us?

Epilogue

'Books is all right.

Far as books go, but as far as they go, they still don't go far enough.'

Woody Guthrie¹

Of all the folkies covered in this book, Lomax was probably the closest we get to a scholar. He studied philosophy as an undergraduate at the University of Texas, his favourite thinkers being Plato and Hegel, and he pursued graduate work in anthropology at Columbia University, though he did not finish his degree.² For their part, the Almanac Singers did have an academic come to their house for weekly lessons on dialectical materialism, but it remains uncertain what and how much they read.³ As Dylan recounts in the documentary *No Direction Home*, though he was registered at the University of Minnesota, he did not attend classes. 'I just didn't go', he says.⁴

Although my folk revivalists were not disciplined as philosophers or historians or political economists, however, they put their ideas into motion by building, doing, and singing. And what weird ideas. Sometimes simple, stark, like Seeger's awkwardly lit television show or Guthrie's machinic Hootenanny; at other times, muddy and cavernous, like Lomax's cybernetic folk circuits. The writings and songs joining up with Dylan give us less coherence than his elders, but they are no less vivid or rich. If Seeger's and Lomax's thinking straddled the strategic and the tactical (but only ever in the name of the tactical folk), Dylan's blows apart strategy entirely, if not always exactly in the way that liberal-romantic celebrations of his electrification would have us believe. Whatever their particular route, these folk revivalists take for granted the tactical media slogan 'By Any Media Necessary', but they do not stop there. Their tactical media, and/or their folk, and/or their time, open up the terrain of struggle and joyfully occupy it.

As acknowledged at the outset, this has not been an exhaustive search or history. Lomax, Seeger, Dylan, and Guthrie in part were chosen for their synergistic connections and for their stature, but there are other routes that might have been taken. For instance, Dylan is celebrated beyond belief for 'plugging in' at Newport, but what about Joan Baez's performance at Woodstock, where she herself 'plugged in' to a tradition of protest by performing 'I Dreamed I Saw Joe Hill Last Night'? What about the mischievous group The Fugs, who generated delirious disturbances from within the sanctified record label of Folkways – and who, for instance, levitated the Pentagon?

What about Buffy Sainte-Marie's radical and border-dissolving recordings? Or Harry Smith, the editor of the *Anthology of American Folk Music*, who also experimented with new techniques in filmmaking and imaginary media generation? We all, especially in the field of media and cultural studies, have much to learn from the American folk revival.

Even folk singer Llewyn Davis, the Coen Brothers's character with whom we began this book, has something to learn. Poor Llewyn. He does not seem satisfied participating in the scene and genre into which he has thrown his lot. As recounted above, towards the film's conclusion, he explodes at a folk singer from Arkansas as she makes her debut at the Gaslight (where Dylan was famously discovered by a writer for *The New York Times*), much like he had earlier exploded at a dinner party at the Gorgeins's, his upper-middle-class patrons uptown, on whose couch he crashes 'only when he's cycled through his friends in the Village'.⁵ After Llewyn stumbles into their dinner party one night, they politely ask him to sing a song, which he only does begrudgingly, quickly erupting when Mrs. Gorgein joins in on the refrain. 'What are you doing? This is bullshit. It's bullshit!'⁶

Yet, Llewyn Davis's problem is not that he is alienated from himself; his problem is that he is not alienated enough! In one scene, he looks with scorn at the young military cadet, Troy, who describes the pleasure he takes in his U.S. Army training, even though he is a pacifist. 'What's next? Do you plug in somewhere?' Llewyn asks contemptuously. As Troy seems to know, there are so many things into which one might get plugged – institutions, groups, scenes, media, both strategic and tactical – yet Llewyn wanders, bumping up against some, but unable to capture or to connect productively. Llewyn might be 'authentic' according to his bohemian definition, but he is a bad pragmatist: he refuses to seek permissions from his label for his work as a session musician, so that he can get paid immediately, which means that he will not receive royalties (and we are led to infer later in the film that the song is going to be a hit); he declines an invitation to join Peter, Paul and Mary, for no apparent reason, which would have allowed him to participate in the transmission of the songwriter (Dylan) who appears at the end of the film to disrupt the very game Llewyn had failed at playing; and he carelessly instructs his sister to throw away his sailor's license, which means that, despite having paid his union dues, he will not be able to ship out after he decides to take a break from music and earn some money. Llewyn insists on preserving a distinction between himself and that into which one might plug – but his 'authentic' independence is, in fact, his tragic flaw.

Llewyn's will-to-remain-unplugged leads him away from the tactical media pragmatism I have tried to unearth from his scene's texts, documents,

and inventions.⁷ If only Llewyn could tune in to the even deeper media imaginaries of the American folk revival. The film takes place in 1961, when Alan Lomax was just getting started at Columbia on his computational folk analyses. (Perhaps Llewyn could have lent a hand?) *Sing Out!* magazine was still going strong, and was about to enjoy its strongest circulation figures in the mid 1960s, in fact. (Perhaps Llewyn could have shared his critical views via this mimeographed DIY publication and helped it to sustain the blow after Dylan abandoned the scene?) Pete Seeger might have needed an extra videographer for *Rainbow Quest*. Or, why *not* join Peter, Paul and Mary, who would most successfully meld the aesthetic predilections of Greenwich Village with the reach of mass media? There are so many opportunities that Llewyn cannot even see, horizons and limitations that he himself has imagined, tools that he cannot even recognize as such. Yet, these tools wait for him, waiting to bestow both disruptive functionalities and affective amplifications. Stuck in an 'eternal return', spinning endlessly in his own motility to act in the world with others, Llewyn cannot explore or appreciate them. But we can.

Notes

Introduction

1. Lomax, 2003, p. 289.
2. Seeger, 2010, p. xi.
3. Dylan, 1973, p. 49.
4. Coen and Coen, 2013.
5. Llewyn thus acquires the kind of knowledge that Simon Frith, drawing on Howard Becker and Pierre Bourdieu, also produces in his book *Performing Rites*, wherein he discusses the three dominant structures of understanding in popular music culture: the art, the folk, and the popular (Frith, 1996, pp. 36–42). As Frith points out, ‘[I]t’s easy enough to be cynical about folk discourse, which seems to rest on an essential self-deception’ (1996, p. 40), but this cynicism would seem to require knowledge of the other discourses.
6. In addition to Frith (referenced above), my reading of the film up to this point draws on Bourdieu, 1984.
7. Of course, there is also middle ground between naïve theories of folk transparency and a more cynical semiotics. Robert Cantwell, for instance, draws on Roland Barthes in a thoroughly sympathetic account of how ‘official’ folk culture can both produce and negotiate rich constellations of meaning: ‘I frankly do not think that the theory of the sign, at least as offered here, has much to do either with language or more generally with culture as it actually is developmentally, psychologically, socially, or phenomenologically; nevertheless, it is a wonderfully ductile, versatile, and objective formula for explaining—to readers already sensitive to the complex metaphorical intangibles in the identifications human beings make between one thing and another and to the dynamic, elusive character of signification in its personal, social, linguistic, and historical milieus’ (Cantwell, 1993, p. 4).
8. Posen, 1993, p. 132.
9. For their part, the Coen Brothers occasionally seem to endorse Llewyn’s developing distaste for the scene, at least as filmmakers. Their camera and microphones hover mockingly on a group of cable-knit-sweater-wearing boys belting a solemn sea shanty in one scene, for instance. The boys’ attempt to morph their voices into transparent channels of tradition is rendered by the Coen’s cold, crisp filmmaking as hilarious, youthful idiocy.
10. See, for example, Cantwell, 1996; Cohen, 2016; Denisoff, 1973; Eyerman and Jamison, 1998; Hampton, 1986; Lieberman, 1989; Reuss, 2000; Rodnitzky, 1976, 1999; Roy, 2010.
11. See, for example, Becker, 1998; Bendix, 1997; Burke, 2009; Cantwell, 1996, 2008; Cohen, 2002, 2008; Cohen and Donaldson, 2014; Donaldson, 2014; Filene, 2000; Miller, 2010; Mitchell, 2007; Peterson, 1997; Rosenberg, 1993; Zumwalt, 1988.
12. See, for example, Brady, 1999; Filene, 2000; Hamilton, 2008.

13. See Frith, 1981, 1986, 1996; Keightley, 2001; Miller, 2010.
14. Williams, 1961; Bourdieu, 1984.
15. Cantwell, 1996, p. 55.
16. Cantwell, 1996, p. 21.
17. Cantwell, 1996, pp. 199-201.
18. I am drawing here on James W. Carey's archeology of 'communication'. According to Carey, although the 'transmission' view is dominant, 'communication' also has a native, ritualistic, and communitarian connotation. See Carey, 2008. My understanding of the malleability of 'communication' and 'media' has also been expanded by John Durham Peters's important work. Peters, 2001.
19. Such a project would be indebted to Stallybrass's and White's groundbreaking work on Carnival. These scholars read Carnival not as an event through which hierarchical relationships are inverted, because such simple inversions necessarily retain oppressive power structures; rather, they approach Carnival as both a text and an interpretive practice through which binaries and categories are dissolved and deflated altogether. They thus extract a post-structuralist poetics of Carnival from Mikhail Bakhtin's allegedly 'troublesome folkloristic approach' (1986, p. 26).
20. Seeger and Hays, 2009.
21. See Williams, 1985, pp. 136-137, 203-204.
22. Storey, 2003.
23. Burke, 2009, p. 9.
24. For a detailed Foucauldian account of the construction of authenticity in German and American folklore, to which I am indebted here, see Bendix, 1997. I have also been greatly influenced in this paragraph by Canadian scholars who have tackled the concept of the folk in the context of the cultural history of Nova Scotia. McKay, 1994; Morton, 2016.
25. Filene, 2000, pp. 12-15, 24; McKay, 1994, pp. 3-42; Storey, 2003.
26. Storey, 2003.
27. Filene, 2000; Storey, 2003. This latter contradiction is given excellent treatment in Frith, 1981.
28. See Cantwell, 1996; Filene, 2000; Hamilton, 2009; Szwed, 2010.
29. Denisoff, 1973, p. 61.
30. Denisoff, 1973, pp. 61-69; Reuss, 2000, pp. 130-140.
31. Denisoff, 1973, pp. 50-54; Eyerman and Jamison, 1998, pp. 64-72. See also Denning, 2011.
32. Reuss, 1971, p. 274.
33. As acknowledged above, Cantwell's *When We Were Good* also emphasizes the technological dimensions of the political folk-song movement, though he does not focus on the genre's conception of media or communication, which is what I hope to contribute. As Cantwell describes Guthrie's 'This Land is Your Land', for instance: '[T]he "ribbon of highway" and "endless skyway" owe much to Firestone Tires, Pan American Airways, and *Life*

- magazine, during a period when America's celebration of itself could include, without contradiction, its technological and commercial monuments' (1996, pp. 137-138). I want to probe those contradictions more deeply from a media-theoretical perspective.
34. 'The Filter Bubble' is a phrase popularized in Pariser, 2011. My understanding of contemporary digital culture glossed here is more directly influenced by the critical scholarship of Michael Bull and Jodi Dean, who will be discussed in more detail in the chapter 6 below. See Bull, 2007; Dean, 2009, 2010.
 35. My approach to 'paths untaken' is indebted to Siegfried Zielinski's approach to imaginary media, which will be more fully considered below. See Zielinski, 2006a, 2006b.
 36. Joshua Meyrowitz coined the term 'medium theory' to refer to the tradition I am tracing here, though I prefer 'media theory' because it emphasizes the heterogeneity and hybridity of most historical media ecologies. See Meyrowitz, 1985.
 37. For instance, Frith: '[T]hat which is worked hard for is presented as coming naturally, that which is commodified is presented as communal' (Frith, 1996, p. 40).
 38. Innis's comparative studies of Western civilizations from a media-theoretical perspective and Kittler's work on analog and digital media have been particularly instructive. See Innis, 1991, 2007; Kittler, 1990, 1999.
 39. E.g. McLuhan, 2003, p. 130; Ong, 1982.
 40. Sterne, 2003, pp. 14-19. See also Sterne, 2011.
 41. For evidence of synergies between contemporary media theory and post-humanism, see Grusin, 2015.
 42. Guattari, 1995, p. 89.
 43. On the broader history of 'the machine in the garden' in American literature and culture, to which I am alluding here, see Marx, 1964.
 44. Richardson, 2003, p. 123.
 45. Critical Art Ensemble, 2001, pp. 4-5.
 46. Lovink, 2002, p. 254.
 47. On culture jamming, see Lasn, 1999. On alternative media, see Downing, 1984; Atton, 2002; Couldry and Curran, 2003. Garcia and Lovink's initial manifesto positions alternative media as a subset of tactical media practice: 'Although tactical media include alternative media, we are not restricted to that category. In fact we introduced the term tactical to disrupt and take us beyond the rigid dichotomies that have restricted thinking in this area, for so long, dichotomies such as amateur Vs professional, alternative Vs mainstream. Even private Vs public' (Garcia and Lovink, 1997, n.p.).
 48. Carl von Clausewitz's nineteenth-century treatise *On War* influentially distinguishes between strategy and tactics: '[T]actics is the theory of the use of military forces in combat. Strategy is the theory of the use of combats for the object of the War' (Von Clausewitz, 1968, p. 173). Yet, as Richardson has

pointed out, tactical media theory (through the reliance on de Certeau) is generally more concerned about what Clausewitz had defined as stratagem: 'Tactics is the deployment of individual parts, strategy, the overview of the whole. This is a very different distinction from de Certeau's opposition between modes of combat; de Certeau's tactics is closer to what Clausewitz called *stratagem*—a concealed, indirect movement which doesn't actually deceive but provokes the enemy to commit errors of understanding' (Richardson, 2003, p. 126).

49. De Certeau, 2011, pp. 29-42, 91-110.
50. Garcia and Lovink, 1997, n.p.
51. Garcia and Lovink, 1997, n.p.
52. Wark, 2002, n.p.
53. Wark, 2002. On the openness of the 'tactical' in tactical media, see also Renzi, 2008.
54. Critical Art Ensemble, 1994, p. 3.
55. Dyer-Witheford and De Peuter, 2009, pp. 185-214.
56. Hardt and Negri, 2000, pp. 290-294; Virno, 2004, pp. 49-66.
57. Raley, 2009, p. 6
58. See Boler, 2008; Dyer-Witheford, 1999; Galloway, 2004; Galloway and Tacker, 2007; Meikle, 2002; Renzi, 2008; Thacker, 2004; Wark, 2004.
59. This productive heterogeneity goes back at least as far as Walter Benjamin's formative work. As Tobias Wilke has pointed out, though mistranslations have buried the ambiguity, Benjamin's essay 'Work of Art in the Age of Mechanical Reproduction' provocatively fused tactical and tactile in '*taktisch*' (Wilke, 2010, p. 41). Thus, the more recent European tactical media discourse's focus on the symbolic and the virtual constitutes a flattening, perhaps, of the originary complexity of the concept in Benjamin's hands.
60. Garcia and Lovink, 1997, n.p.
61. McLuhan, 1969.
62. Lovink, 2002, p. 256.
63. Critical Art Ensemble, 2001. Arthur Kroker and Michael A. Weinstein were perhaps amongst the first to express this hunch in their early, critical look at cyberculture's forgetting of embodiment. See Kroker and Weinstein, 1994.
64. Critical Art Ensemble, 2001, p. 11 (emphasis added).
65. Critical Art Ensemble, 2001, p. 39.
66. See, in particular, Richardson, 2003; Dieter, 2011.
67. Critical Art Ensemble, 2001, p. 2.
68. On Hoffman's drawing of inspiration from the folk song-fueled Civil Rights Movement, see Hoffman, 2000. On The Fugs's collaborations with the Yippies, including their remarkable levitation of the Pentagon, see Sanders, 2011. Pete Seeger discovered the powers of 'Give Peace a Chance' almost immediately: 'Two, three, four minutes went by as 500,000 sang it over and over' (Seeger, 2009, p. 156). Although Lennon's ramshackle, low-fi recording also signals clear debts to Alan Lomax's phonography, Lennon himself

seemed to have positioned the gesture on the cutting edge of consumer culture, a true tactical disturbance; as he said at one point during the famous 'Bed In' stunt during which the song was recorded: 'We're selling it like soap. They've been selling it like soap, and now we're gonna sell peace just like soap' (Lennon and Ono, 2011).

69. Kluitenberg, 2011a, p. 13.
70. E.g. Richardson, 2003; von Clauswitz, 2003.
71. Critical Art Ensemble, 2008.
72. Wark, 2002.
73. Lovink and Rossiter, 2010. In general, Lovink has had a characteristically open and pragmatic relationship with tactical media, but one can see the concept slowly receding from his writings, which have justifiably gotten darker over the years, as is evinced, for instance, by Lovink, 2008, 2016; Lovink and Schneider, 2003. On 'organized networks' see also Rossiter, 2006.
74. Dieter, 2011, n.p.
75. Dieter, 2011, n.p.
76. Kluitenberg, 2011a, p. 10.
77. The long view or 'deep time' approach I am foreshadowing here was pioneered by Siegfried Zielinski, who borrows the concept from paleontology and geology: 'From this deep perspective, looking back over the time that nature has taken to evolve on Earth, even at our current level of knowledge we can recognize past events where a considerable reduction in diversity occurred. Now, if we make a horizontal cut across such events when represented as a tree structure, for example, branching diversity will be far greater below the cut—that is, in the Earth's more distant past—than above' (2006a, pp. 5-6). Zielinski then transposes this non- or a-modern approach to 'evolution' onto the field of media-historical change as a way of challenging 'evolutionary' media narratives, a path I see myself following here.
78. de Certeau, 2011; Garcia and Lovink, 1997. Raley critiques this line of considering tacticians as users rather than producers: 'de Certeau's neat alignment of users and tactics, producers and strategy, is complicated by tactical media practitioners who write their own scripts and build their own gadgets' (Raley, 2009, p. 16). She nonetheless treats these productions primarily on a discursive or symbolic level, rather than a media-archeological one.
79. This is perhaps more pronounced in scholarly treatments of tactical media than in the heterogeneous field of practice. The N5M4 Reader, for instance, has an entire section entitled 'The Tactical and the Technical', which features essays that probe the politics of media technologies. See 'Next 5 Minutes', 2003. Critical Art Ensemble's *Digital Resistance* also features chapters that describe in detail how to hack, for instance, a Game Boy, thus pointing beyond Clausewitz's notion that usage is more important than material constitution. See Critical Art Ensemble, 2001.

80. See Huhtamo and Parikka, 2011a, 2011b; Kluitenberg, 2006a, 2006b; Parikka, 2012.
81. As Kittler himself describes his materialist grounding of Foucault: 'Even writing itself, before it ends up in libraries, is a communication medium, the technology of which the archeologist simply forgot' (Kittler, 1999, p. 5).
82. Kittler, 1990, p. 369.
83. Habermas, 1991.
84. Raley, 2009, p. 14.
85. Here, I echo Dieter's critique: 'Raley's study mainly leaves questions of anything more-than-human unexamined; or more accurately, she does not deal with how tactical behaviours twist the machine and nonmachine within apparatuses of social reproduction' (Dieter, 2011, n.p.).
86. See Fuller, 2005; Munster, 2006; Parikka, 2007.
87. Parikka, 2007, p. 17.
88. Haraway, 1991, pp. 149-181; Braidotti, 2013.
89. Deleuze and Guattari, 1987, p. 142. For an earlier stab at this concept, see Svec, 2015b.
90. '[T]he machines are social before being technical. Or, rather, there is a human technology which exists before a material technology' (Deleuze, 1988, p. 39).
91. Guattari, 1995, p. 47.
92. Zielinski, 2006a, pp. 5-11.
93. Zielinski, 2006a, p. 27. Zielinski borrows the word 'anarcheology' from the German Foucault scholar Rudi Visker.
94. In addition to Haraway's challenging utopianism and Zielinski's 'deep time' project, the direction of this research has been strongly influenced by Michael Taussig's important interventions into the history of phonography in the context of colonialism. See Taussig, 1992.
95. Zielinski, 2006a, p. 7.
96. Zielinski, 2006a, p. 34.
97. Parikka, 2012; Goddard, 2015.
98. Foucault, 2010, pp. 101-120.
99. Parikka, 2012, pp. 52-55. See also Goddard, 2015, p. 1768.
100. Taylor, 1992.

1. Alan Lomax's Deep Rivers of Digitality

1. A shorter version of this chapter appeared as 'Folk Media: Alan Lomax's Deep Digitality' (38, no. 2) in the *Canadian Journal of Communication*. Svec, 2013.
2. Kittler, 1997, p. 115.
3. Lomax in Naimark, 1998b.
4. Wiener, 2013.
5. Wiener, 2013, pp. 11, 160-61, 202.

6. See Wiener, 1950, 2013; Ashby, 1952, 1963; Von Neumann, 1958. For a critical and fascinating reconsideration of the role of technological objects in this field, see Johnston, 2008.
7. Shannon and Weaver, 1963.
8. Wiener, 1950, p. 17. Johnston has pointed out the striking differences between Shannon's and Wiener's understandings of information in Johnston, 2010, p. 202.
9. Hayles, 1999, p. 50.
10. For an understanding of just how wide-ranging the cybernetics discussions were, we can now read the entire transcript of the Macy conferences in Pias, 2016.
11. Hayles, 1999. See also Bukatman, 1993.
12. Dyer-Witheford, 2015.
13. Curtis, 2011.
14. For various treatments of the influence of Shannon and information theory on Kittler, see Gane, 2005; Hansen, 2004; Krämer, 2006.
15. Kittler, 1990, p. 370.
16. Kittler, 1990, p. 370.
17. Kittler, 2010, pp. 29-46. For a critique of this move on Kittler's part, see Hansen, 2004, pp. 76-77.
18. Kittler, 1999, p. 1.
19. Kittler, 1999, p. 2.
20. Hayles, 1999, pp. 54-56. See also Pickering, 2010.
21. For evidence of cybernetics' tactical (and in some cases strategic) utility see, for instance, Genosko, 2012; Guattari, 1995; Lafontaine, 2007; Medina, 2014; Serres, 2007; Terranova, 2004; Thibault and Hayward, 2013, 2014; Wolfe, 1995.
22. For treatments of Lomax that also foreground his technologies, see Filene, 2000; Szwed, 2010.
23. Margaret Mead was a longtime supporter of Lomax, and cybernetic anthropologist Raymond Birdwhistell also taught Lomax as his Cantometrics project was in the early stages of formulation. See Szwed, 2010, pp. 346-347, 328-329.
24. Filene's excellent book *Romancing the Folk* explores the modernist dimensions of American folklore, with a focus on the Lomaxes' field trips in the 1930s. As he points out, their Dictaphone's seeming fidelity led Alan's father to think of their work as objective 'sound photographs' (2000, p. 56). Filene also discusses Alan's radio broadcasts into the 1940s, his work at the Archive of American Folk Song, and (albeit briefly) Cantometrics and the Global Jukebox. Szwed's illuminating biography, *Alan Lomax: The Man Who Recorded the World*, highlights the importance of sound-recording technology as a tool for Lomax throughout his career: 'Having lived through the transition from transcribing songs to recording them, he could appreciate the limitations of an audio-only medium, but also understood how these limits refocused the way music was received: the body of the singer could now be heard [...]' (2010, p. 334). Szwed's book also includes detailed if descriptive

accounts of the folklorist's computer-aided projects. For other accounts of the Lomaxes's use of machines, see also Shelemay, 1991; Brady, 1999; Hamilton, 2008. Still, Lomax's cybernetic and proto-post-humanist renderings of machines have yet to be analysed, and his digital escapades have gone unnoticed by scholars of media, which is my contribution.

25. Averill, 2003; Mullen, 2008.
26. Hansen, 2004; Hayles, 1999.
27. As we will see, Lomax often figures folk music as an ocean or river. 'Deep River of Song' is also the title of Rounder Records' album series devoted to Lomax's recordings. Lomax, 1999.
28. For the notion of 'things to think with' I am indebted to Turkle, 2007.
29. Lastra, 2000; Gitelman, 1999; Brady, 1999; Filene, 2000.
30. Bendix, 1997.
31. Bendix, 1997.
32. Sharp, 1932, p. xxi.
33. Sharp, 1932, p. xxvi
34. See Kittler, 1999, pp. 21-114.
35. Filene, 2000, pp. 22-27.
36. Cf. Brady, 1999.
37. Filene, 2000; Szwed, 2012.
38. Brady, 1999; Sterne, 2003.
39. Ernst, 2011, p. 243.
40. Szwed, 2010.
41. Barthes, 1990, p. 299
42. Lomax, 2003, p. 11.
43. Lomax, 2003, p. 14.
44. Lomax, 2003, p. 71.
45. Lomax, 2003, p. 131.
46. Lomax, 2003, p. 140.
47. Szwed, 2010, p. 298.
48. Lomax, 1993.
49. Guthrie, 2015.
50. Lomax, 1993, p. xiii.
51. Lomax, 2010, pp. 10-11.
52. Mullen, 2008, p. 49.
53. Mullen, 2008, p. 111.
54. Fabian, 1983.
55. Lomax, 2010, pp. 210, 8, 51, 85.
56. Lomax, 2003, p. 22.
57. Lomax, 2003, p. 92.
58. Lomax, 2003, p. 116.
59. Collins in Rose, 2012.
60. Lastra, 2000; Sterne, 2003; Williams, 1980.
61. Williams, 1980, p. 53.

62. Filene, 2000; Szwed, 2010.
63. Sterne, 2003, p. 226.
64. Lomax, 2003, p. 107.
65. Perhaps Alan Lomax inherited this fascination from his father. As Marybeth Hamilton writes of the elder song collector, 'Inextricable from that sense of virile adventure was an evangelical enthusiasm for recording technology' (2008, p. 79). Again, Filene (2000) has also identified the Lomaxes's sense of the Dictaphone as an objective tool for documentation, but I am trying to highlight how the younger Lomax's descriptions of recording occasionally tend to blur the lines dividing subject, tool, and object, entirely.
66. 'What seems crucial about the fascination with the Other's fascination with the talking machine is the magic of mechanical reproduction itself. [...] To take the talking machine to the jungle is to emphasize and embellish the genuine mystery and accomplishment of mechanical reproduction in an age when technology itself, after the flurry of excitement at a new breakthrough, is seen not as mystique or poetry but as routine' (Taussig, 1992, pp. 207-208).
67. Lomax, 2003, p. 64-65.
68. Lomax, 2003, p. 178; emphasis added.
69. Lomax, 2010, p. 240.
70. Lomax, 2010, p. 27
71. Derrida, 1995.
72. Alan Lomax quoted in Szwed, 2010, p. 335.
73. Lomax, 1979.
74. Shannon and Weaver, 1963.
75. Lomax, 2010, p. 138.
76. Filene, 2000; Szwed, 2010. On Lomax's mid-1950s work with Columbia records, see also Western, 2014.
77. Lomax, 2010, p. 208.
78. Bush, 1945.
79. Lomax, 2010, p. 221.
80. Sterne, 2003.
81. Lomax, 2003, p. 325; emphasis added.
82. Lomax, 1976, p. 79.
83. Naimark, 1998a.
84. Lomax, 1976, p. 13.
85. Lomax, 1968, p. 22-23.
86. Lomax, 1968, p. 6.
87. Lomax, 2003, p. 279.
88. Lomax, 2003, p. 275
89. Lomax, 1968, p. 222.
90. Lomax, 1968, pp. 264-269.
91. Lomax, 1976, p. 4.

92. Lomax in Gardner, 2005.
93. Cf. Helmreich, 2007.
94. Paulay in Lomax and Paulay, 2008.
95. Lomax, 2003, p. 251.
96. Lomax, 1976.
97. Lomax, 1976, p. 12.
98. Berkowitz, 1968, p. 310.
99. Johnston, 2008, p. x.
100. Lomax, 1968, p. 8.
101. Lomax, 1968, p. 134.
102. Pickering, 2010, p. 6.
103. Lomax, 1968, p. 4.
104. Virilio, 1997, p. 10. See also Virilio, 2000.
105. Bateson, 1972, p. 315.
106. Lomax, 1968, p. 4.
107. Lomax, 1968, p. 9.
108. Lomax, 1976, p. 9.
109. Lomax in Gardner, 2005.
110. Szwed, 2010, p. 385.
111. Lomax, 2003; Naimark, 1998b.
112. Lomax, 2003, p. 325.
113. Hansen, 2006; Hayles, 2008; Munster, 2006.
114. Hayles, 2008.
115. Hansen, 2004.
116. Kittler, 1999.
117. Hansen, 2004.
118. Hansen, 2004, p. 10.
119. Averill, 2003.
120. Szwed, 2010, p. 388.
121. Critical Art Ensemble, 1998, p. 5.
122. Lomax, 1976, p. 21.
123. Lomax, 1976, p. 25.
124. Lomax, 1979.
125. Deleuze and Guattari, 1987, p. 380.
126. Hansen, 2006.
127. Negroponte, 1995.
128. Lomax, 1959.
129. You too can recreate this journey, or any number of others, via the Lomax Geo Archive (<http://www.culturalequity.org/lomaxgeo/>).
130. Rose, 2012.
131. Farman, 2010, p. 11.
132. Fedderson, 2013.
133. Wark, 2002, n.p.
134. Garcia and Kluitenberg, 2011, n.p.

- 135. Garcia and Kluitenberg, 2011, n.p.
- 136. Lomax, 2003, p. 324.
- 137. Lomax, 2003, p. 325.

2. Pete Seeger's Time-Biased Tactics

- 1. A shorter version of this chapter was published in the *Journal of Popular Music Studies* as Svec, 2015a.
- 2. Seeger, 1972, p. 218.
- 3. For a study of the place of noise in rock, see Gracyk, 1996.
- 4. Seeger and Reynolds, 1963.
- 5. This is the kernel of the revival's ideological character, as taken up by rock culture, for Simon Frith: inspired by arguments made by folk revivalists, rock ideologues in the mid-1960s made it seem as though mass-industrial society's media networks were capable of delivering 'authentic', community-binding cultural products (Frith, 1981). Thus, as for Theodor Adorno, authenticity is viewed as lubrication for an alienating socioeconomic system. See Adorno, 1973.
- 6. Seeger, 1972, p. 296.
- 7. Filene, 2000, p. 195.
- 8. Cohen, 2002. There is a growing body of writing on Pete Seeger, from various fields and perspectives. On Seeger's life and career, see Dunaway, 1981; Wilkinson, 2009. On the evolution of Seeger's reputation from Communist villain to liberal hero, see Bromberg and Fine, 2002. On Seeger's 'complex pastoralism', see Ingram, 2008. Connections between Seeger's thought and tactical media theory have not been explored, however, which is the contribution of this chapter.
- 9. 'Hot media are ... low in participation, and cool media are high in participation or completion by the audience' (McLuhan, 2003, p. 39).
- 10. Innis, 1991, 2007.
- 11. Innis, 1991, pp. 61-131.
- 12. Innis, 2007.
- 13. Innis, 2007, p. 27.
- 14. Innis, 2007, p. 27.
- 15. McLuhan, 2003, p. 19.
- 16. McLuhan, 2003, pp. 39-40.
- 17. McLuan, 2003; McLuhan and Fiore, 2001.
- 18. For a discussion of how and why the counterculture appropriated various aspects of McLuhan's arguments about television, see Bodroghkozy, 2001.
- 19. Seeger, 1972, p. 145.
- 20. See Bendix, 1997; Sterne, 2003.
- 21. Seeger, 1972, p. 145.
- 22. Seeger, 1972, p. 320.

23. On Seeger's and his comrade's immediate postwar projects, such as People's Songs Inc. and People's Artists, see Lieberman, 1989.
24. Seeger, for instance, wrote a letter to his Grandmother in 1940, keen to describe the materiality of his new job: 'Dear Grandmother, Note by the letterhead that I am now a man of position. I type out cards, and listen to and file phonograph records for my friend Alan Lomax, who is Librarian in charge of the Archive of American Folk-Song here. All in all, it is very interesting and enjoyable work' (Seeger, 2012, p. 14).
25. Seeger, 1972, p. 21.
26. See Scorse, 2005; Wald, 2015.
27. Seeger in Kupfer, 2001.
28. Seeger, 2012, p. 317.
29. Seeger, 1972, p. 288.
30. Seeger, 1972, p. 209.
31. Seeger and Hays, 2009, p. 38.
32. Seeger and Hays, 2009, p. 38.
33. See Bendix, 1997; Brady, 1999; Sterne, 2003.
34. Seeger, 1972, p. 197.
35. Rousseau, 2004. For a discussion of Rousseau's critique of theatricality, see Sennett, 1974.
36. Derrida, 1976.
37. Goffman, 1959; Butler, 1999.
38. McLuhan, 2003, p. 413-414.
39. McLuhan, 2003, p. 413.
40. Seeger, 1956, p. 32.
41. See Bodroghkozy, 2001, pp. 123-163; Wilkinson, 2009.
42. Seeger, 1972, p. 197.
43. Seeger, 1972, p. 447.
44. Wilkinson, 2009.
45. The release of the Sony Portapak in 1967 produced an excitingly utopian discourse—suddenly television, it was believed, could become a two-way medium—and, in some ways, Seeger's own aesthetic is very similar to that put forth in such works as *Guerilla Television* and the magazine *Raindance*, which explored the interactive potentials of the new medium of video. See Shamberg, 1971.
46. Axton in Dietrick, 2007.
47. Seeger in Brown, 2007.
48. Seeger, 2005.
49. McLuhan, 1969.
50. Cf. Habermas, 1991.
51. Cf. Peters, 1999.
52. Peters, 1999.
53. Innis, 1991, pp. 61-91.
54. Innis, 1991, p. 61.

55. McLuhan, 2003.
56. Ong, 1982, pp. 135-138.
57. Derrida, 1976.
58. Barthes, 1972; Foucault, 1978; Baudrillard, 1994.
59. E.g. Auslander, 1999; Lastra, 2000.
60. Sterne 2003, 2011.
61. Peters, 1999, p. 53.
62. Peters, 1999, p. 62.
63. Peters, 1999, p. 55.
64. Seeger, 1972, p. 405.
65. Seeger, 1972, p. 399.
66. Seeger in Brown, 2007.
67. Seeger, 1972, p. 155.
68. Bolter and Grusin, 1999.
69. Bolter and Grusin, 1999, p. 2.
70. Bolter and Grusin, 1999, p. 3-15.
71. Auslander, 1999.
72. Bolter and Grusin, 1999.
73. 'He could be one of the most recorded American artists, along with Duke Ellington' (Dunaway, 2011, p. xii).
74. See Wilkinson, 2009.
75. Seeger, 1972, p. 268.
76. Guthrie, 1963.
77. Denisoff, 1973, pp. 176-189.
78. Cantwell writes, for instance, of Harry Smith's influential anthology: 'In the *Folkways Anthology of American Folk Music* we can view the birth of a counterculture at the very moment that a new medium, television, was making a spectacle of American life and drawing us all unwittingly into its audience' (Cantwell, 1996, p. 199).
79. Ingram, 2008, p. 25.
80. Although his experience on the blacklist gave him an appreciation for free speech, and a preference for libel laws over censorship, his position is not liberal. In a letter to Marvin Frankel in 1986, for instance, though he also praises the First Amendment, he also acknowledges his own role as censor ('I choose what songs not to sing') and considers that there are some kinds of information that should not be free: 'I suspect I would not like to see a booklet giving the details of how anyone in the world can make an atom bomb by stealing a few pounds of plutonium, and have this book translated into hundreds of different languages and made available to people around the entire world' (Seeger, 2012, pp. 170-171).
81. Seeger, 1972, p. 481.
82. Seeger, 1972, p. 482 (emphasis in the original).
83. Seeger, 1972, p. 211.
84. See Ingram, 2008.

85. Pedelty, 2009, p. 425.
86. Guevara, 1997, p. 52.
87. Rancière, 2009.
88. Rancière, 2009.
89. Raley, 2009.
90. Garcia and Lovink, 1997, n.p.
91. Galloway and Thacker, 2007.
92. Seeger, 2012, p. 168.
93. Wark, 2002, n.p.
94. Wark, 2002, n.p.
95. Dieter, 2011; Lovink and Rossiter, 2005.
96. Seeger, 1972, pp. 451-452.
97. Seeger, 1972, p. 546.
98. Seeger, 2012, p. 159.
99. Lovink, 2002, p. 257.
100. Berardi, 2011, p. 133.
101. Kupfer, 2001, n.p.
102. Seeger, 2012, p. 340.

3. Bob Dylan's Noisy Faces

1. Deleuze and Guattari, 1986, p. 26.
2. Apple, 1984.
3. Wordsworth, 1969, p. 157. The concept of 'topoi' here is taken from Erkki Huhtamo, who adapts it from Ernst Robert Curtius for the study of media history: '[T]opos [is] a stereotypical formula evoked over and over again in different guises and for varying purposes. Such topoi accompany and influence the development of media culture' (Huhtamo, 2011, p. 28). In identifying Romantic expressivity as a digital topos, I also draw from Kittler's account of the ideology of immediacy in German Romanticism, as well as Thomas Streeter's connection of the Romantic movement to digital culture, neoliberalism, and the Internet, which can be found respectively in Kittler, 1990; Streeter, 2011.
4. Dylan, 1973, p. 161.
5. Bob Dylan qtd. in Jobs, 2013.
6. Ricks, 2003, p. 260.
7. As Marshall points out, the straddling of mass appeal and avant-garde pretensions is the essence of rock culture, of which Dylan is the first star. See Marshall, 2007.
8. Gray and Quinn, 2011.
9. See Isaacson, 2011.
10. Steve Jobs quoted in Levy, 2006, p. 82.

11. My understanding of Romantic authenticity has been informed by Abrams, 1953; Kittler, 1990; Guignon, 2004; and Taylor, 1989, 1992. 'Self-possessive' individualism to which I am alluding here has also been informed by Macpherson, 1962.
12. 'Star image' is a concept developed by Richard Dyer that describes the collection of texts outside of filmic performances per se that intertextually signify the complex identity of a star. Dyer, 1998.
13. Here is a short guide to what appears to me to be the strongest and most influential writing currently within 'Dylan studies'. For work that privileges Dylan's lyrics, see Boucher and Browning, 2004; Day, 1988; Dettmar, 2009; Hughes, 2013; Ricks, 2003; Scobie, 2003. For work that more strongly incorporates performance and music into lyrical analysis, see Marcus, 2005, 2011; Negus, 2008, 2010; Williams, 2004a, 2004b, 2005. Finally, for work that gives more attention to historical context and to broader cultural and political forces, see Cossu, 2012; Marqusee, 2005; Marshall, 2007; Wilentz, 2011.
14. To date, the most insightful critique of 'Dylanology' has been offered in a short review essay by Karl Hagstrom Miller, entitled 'How to Write About Bob Dylan: A Step-by-Step Guide'. Among the necessary steps, Miller lists 'Start With the First Time You Heard Bob Dylan', 'Make It About America', 'Embrace the Newport Myth', and 'Embrace Individualism' (Miller, 2011).
15. Again, 'star image' is a concept introduced by Richard Dyer. Dyer, 2008.
16. Day, 1988, p. 6.
17. Scobie, 2003, p. 35.
18. Hughes, 2013, p. 121.
19. Miller, 2011, p. 367.
20. Hughes, for instance: '[...] and when the magic takes place, its productions can unaccountably appear wholly resistant to precedent, singular and spontaneously self-organizing' (Hughes, 2013, xiii).
21. Cossu, 2012; Marshall, 2007.
22. Guattari, 1995, p. 54.
23. As Miller cheekily warns, 'One could trace a line from Dylan's rejection of social responsibility through Madison Avenue's "conquest of cool" to neo-liberalism and the "end of Welfare as we know it." Do not do it. It does not fit the script' (Miller, 2011, p. 368).
24. Gilles Deleuze himself was aware of some of the connections I want to make. As Jason Demers has pointed out, Deleuze and Guattari actually met Dylan and Joan Baez backstage in 1975, and Deleuze would come to cite Dylan's lyrics in an essay: '[A]s a teacher I should like to be able to give a course as Dylan organizes a song, as astonishing producer rather than author' (Deleuze quoted in Demers, 2011). Todd Kennedy has also interpreted Dylan using Deleuzian concepts, and his study focuses on images of the hobo and the nomad. Interestingly, however, I am arguing the exact opposite of Kennedy, who claims that 'Dylan has consistently merged aspects of blues, country, and literary traditions, to invoke images of mobility that

- examine individual freedom in a world where technology, fragmentation, and homogeneity seem to result in a destructive dehumanizing of individuals' (Kennedy, 2009, p. 37).
25. On Dylan's biographical narrative(s) and myriad transformations, see Brown, 2014; Cossu, 2011; Dylan, 2004; Heylin, 2001, 2009; Shelton, 1997; Sounes, 2001; Yaffe, 2011.
 26. Miller, 2011.
 27. Marshall, 2007, p. 67.
 28. Hampton, 1986, p. 55.
 29. Turner, 1972, p. 25.
 30. Marshall explores Dylan's individualization as the work of the star system in general: 'While Woody embodied the spirit of the folk, a personification of the multitudes, stardom offers something different. It utilizes stars as embodiments of social groups and types but it also valorizes the specific individuality of the star' (2007, p. 78).
 31. Shelton, 1972, p. 28.
 32. Shelton, 1972, p. 28.
 33. Fields, 1972, p. 35 (emphasis in original).
 34. According to Lee Marshall, this text is an example of another tension in 'folk' Dylan's star discourse, which is that between 'star as ordinary' and 'star as special' (Marshall, 2007, p. 79-83).
 35. Dylan, 1973, p. 51.
 36. Scobie discusses this passage as 'a tribute to the whole intertext of American song' (Scobie, 2003, p. 134). My interest is not only in the text-fetishizing 'death of the author' angle, however, but in the sensitivity to medium specificity, here and elsewhere in Dylan's writings, in this acknowledgment of collective knowledge production.
 37. Marshall, 2007, p. 52-83.
 38. In Lerner, 2007.
 39. Marshall, 2007, pp. 52-83.
 40. See Frith, 1981; Keightley, 2001.
 41. See Wolman, 2012.
 42. Théberge, 2001.
 43. Frith, 1981.
 44. On the lubricating effects of authenticity in popular music, see also Frith, 1986; Keightley, 2001. Marshall masterfully incorporates these cultural studies critiques into his own account of Dylan's stardom. Marshall, 2007.
 45. On this period in particular, see Cohen, 2002, pp. 221-224; Hughes, 2013, pp. 85-132; Marshall, 2007, pp. 88-114.
 46. Silber's early critique of Dylan emphasized his turn to individualism and cryptic imagery, which I echo in this paragraph. This understanding of Dylan's 'turn', however, has become both a rallying point for rock critics who defended him and for literature scholars more recently. See Silber, 1972.

47. Silber, 1972, p. 67. Lawrence Wilde has fascinatingly explicated Dylan's 'expressionist' period using the thought of Ernst Bloch and Adorno, in Wilde, 2004. For this and other interesting attempts to reconsider the political aspects of Dylan's 'anti-political' work, see Boucher and Browning, 2004.
48. Nelson, 1972, p. 104.
49. Frith, 1986, p. 265.
50. Scorse, 2005.
51. Ingram, 2008.
52. According to Gracyk, noise is a characteristic feature of rock aesthetics in general. See Gracyk, 1996. For a philosophical treatment of the complicated relationships between signals and noises, and of the regenerative and radical powers of noise, see also Serres, 2007.
53. Nelson, 1972, p. 104.
54. Here, Dylan discourse taps in to a larger discourse of electric guitar as sincere tool. According to Simon Frith, 'The guitarist became a symbol of rock because he (masculinity is a necessary part of the argument) communicates physically on stage even more obviously than the singer' (1986, p. 268).
55. Shelton, 1997, p. 285.
56. Keightley, 2001, p. 133.
57. Hughes, 2013, pp. xiii, 118-119.
58. Scobie, 2003, p. 21.
59. Kittler, 1990, pp. 3-123.
60. Kittler, 1990. My understanding of Kittler's difficult work has here been greatly enhanced by Geoffrey Winthrop-Young's *Kittler and the Media*. Winthrop-Young, 2011.
61. Kittler, 1990, p. 83.
62. Kittler, 1990, p. 369. On the 'author-function', see Foucault, 2010, pp. 101-120.
63. Marx and Engels, 1998; Lukács, 1971.
64. Freud, 2002.
65. Kittler, 1999, p. 14.
66. Kittler, 1999.
67. On the history and aesthetics of the Graphical User Interface, see Emerson, 2014; Galloway, 2012; Johnson, 1997; Manovich, 2001; Munster, 2006. Munster also uses Deleuze and Guattari to explore 'interfacial' media art, though connections to Kittler are not made.
68. Kittler, 1997.
69. Deleuze and Guattari, 1987, p. 167. As Genosko points out, Guattari explored the concept of 'faciality' in *The Machinic Unconscious* before the idea was further developed in Deleuze and Guattari's *A Thousand Plateaus*. See Genosko, 2002. However, I agree with Genosko on the point that worrying about which author came up with which idea is contrary to the spirit of their work. See also Guattari, 2011.
70. Althusser, 1971.
71. Deleuze and Guattari, 1987, p. 175.

72. Deleuze and Guattari, 1987, p. 168.
73. See Hinkson, 2016.
74. Genosko, 2002, p. 47.
75. Guattari, 2011, p. 83-84.
76. For an exploration of noise and parasites that, like Guattari's concept of machinic faciality, both borrows from and breaks beyond the paradigms of cybernetics and information theory, see Serres, 2007.
77. Guattari, 2011, p. 77.
78. Deleuze and Guattari, 1987. As Gary Genosko puts it, 'There are different kinds of subjectivity, but they are always of the group' (2002, p. 75).
79. Brennan, 2011.
80. Quoted in Isaacson, 2011, p. 91.
81. Malone, 2011.
82. See Barbrook and Cameron, 1996; Friedman, 2005; Streeter, 2011.
83. On the exploitative nature of global ICT production from various perspectives, see Taffel, 2012; Dyer-Witheford and De Peuter, 2009; Gabrys, 2011; Nest, 2011; Pasquinelli, 2008. Alex Gibney's *Steve Jobs: The Man in the Machine*, a recent documentary about Steve Jobs's personal and Apple's ethical failings, also sketches some of this complex territory. See Gibney, 2015.
84. Lovink, 2011, p. 33-34.
85. Jobs, 2005, n.p.
86. Streeter fascinatingly connects the ideologies of Romanticism to the neoliberalist market fundamentalism of the 1980s in Streeter, 2011. We can also find connections between computing and Romanticism by way of Fred Turner's important work on the countercultural roots of 'cyberculture'. See Turner, 2006, 2009, 2013. Yet, for Streeter, Romanticism's 'blind spots concern social relations and historical context' (Streeter, 2011, p. 178), and the same seems to apply for Turner to aspects of counter/cyber-culture, whereas I am moving here towards a more post-humanist and media-theoretical consideration of communication and subjectivity.
87. Baca and Rizzo, 2009.
88. In her study of avant-garde materialist poetics, Lori Emerson refers to the brand rhetoric described here as 'the ideology of the user-friendly' (Emerson, 2014, pp. 47-85).
89. Bull, 2007.
90. EveryAppleAds, 2012.
91. Deleuze and Guattari, 1983, p. 8.
92. Guattari, 1995, p. 4.
93. Guattari, 2011, p. 76.
94. Hentoff, 1997, p. 47.
95. Shelton, 1997, p. 287.
96. Dylan, 1973, p. 124.
97. Dylan, 1973, p. 126.
98. Dylan, 1973, p. 167.

99. Scobie, 2003, p. 129.
100. Dylan, 1973, p. 188.
101. Dylan, 1973, p. 212.
102. Dylan, 1973, p. 206.
103. Dylan, 1973, p. 123.
104. Peters, 1999, pp. 33-62.
105. Dylan, 1973, pp. 158, 192.
106. Dylan, 1973, p. 207.
107. Dylan, 1973, p. 208.
108. Dylan, 1973, p. 39. When poet Allan Ginsburg recalled hearing Dylan for the first time, he remembered this song in particular; he claims to have cried because he recognized that a younger generation was carrying on the torch of the Beats. See Scorse, 2007.
109. Day, 1988, p. 116.
110. Day, 1988, p. 115.
111. Hughes, 2013, p. 143.
112. Scobie, 2003, p. 75.
113. Dylan, 1973, p. 205.
114. Dylan, 1973, p. 205.
115. 'The closest I ever got to the sound I hear in my mind was on individual bands in the Blonde on Blonde album. It's that thin, that wild mercury sound. It's metallic and bright gold, with whatever that conjures up' (Dylan, 1978, p. 85). Taking a cue from this quotation, Keith Negus has explored the ways in which, contrary to common conceptions of his studio process, Dylan actually worked towards a 'phonographic aesthetic': 'Dylan's musical identity is not something that appears to listeners independent of its realisation through recording. Studio practice and the art of phonography are integral to Dylan's identity and song-writing' (Negus, 2010, p. 223).
116. Wershler-Henry, 2005.
117. I have found varying accounts as to how Dylan composed into his rock period. Clinton Heylin claims that Dylan would continue to write primarily with a pen or pencil, using a typewriter only to revise, in Heylin, 2009. This does not seem supportable to me, going by the firsthand accounts of Baez and Robertson cited below. Regardless, images of Dylan at a typewriter began to circulate increasingly into his rock/surrealist period, and his work clearly begins to explore a 'typewritten' aesthetic, no matter how he actually composed.
118. Dylan, 1973, p. 160.
119. Kittler, 1999; Wershler-Henry, 2005.
120. Heylin, 2001, p. 169. Emphasis added.
121. Dylan, 1971, p. 11.
122. Wershler-Henry, 2005.
123. Dylan, 1973, p. 182.
124. Heylin, 2009, p. 240.
125. Robertson, 2004, p. 66.

126. Cossu, 2012; Marshall, 2007; Shank, 2002; Williams, 1994.
127. Hughes, 2013, p. 4. Hughes here echoes Guattari's discussion of faciality as persona: 'it is not legitimate to bring faciality back to a theatrical mask, as the Etruscan etymology of "persona" would wrongfully result in doing. This would suppose that a profound, authentic, originary, inalienable faciality would continue to exist behind this superimposed masks'. Guattari, 2011, p. 81.
128. Guattari, 1995, p. 83.
129. *Battlestar Gallactica*, 2007.
130. Parikka, 2015, pp. 88-96. See also Rossiter, 2017, p. 34. For a discussion of Molleindustria's work more generally in the context of tactical media, see Dyer-Witheford and De Peuter, 2009, pp. 198-199.

4. A Folk Approach to Imaginary Media

1. Critical Art Ensemble, 2001.
2. See Parikka, 2012, pp. 136-158. For other examples of work that blend research and creative practice, see Gansing, 2013; Miller and Matviyenko, 2014; and Löwgren and Reimer, 2013.
3. My imaginary media workshops continued earlier work of mine that had sought to bring a performative approach to bear on imaginary media creation. For a ficto-critical treatment of my performance practice from a nonetheless media-archeological perspective, see Svec, 2016.
4. Parikka, 2016, p. 79.
5. In addition to the landmark work in Kluitenberg 2006a, and Huhtamo and Parikka, 2011b, see Beil, 2014; Natale and Balbi, 2014; Nye, 2014; Schröter, 2014; Wythoff, 2014.
6. Despite this, there was a nice coincidence involved in New Brunswick being declared the spiritual centre of the enterprise, for it was at the University of New Brunswick in Fredericton that Harold Adam Innis first delivered his foundational essay, 'A Plea for Time', in which he suggests that a return to the community-engendering qualities of oral dialogue might remedy some of the deleterious effects of the individualizing, space-biased media of modern capitalism. Thus, there is a longer history of the margins, and the margins within the margins, serving as a place in which to understand media power. See Innis, 1991.
7. To contribute, visit <http://nbimaginarymedialab.tumblr.com>.
8. Boal, 1992.
9. Although the game was developed by Boal, I am indebted to the Mexican artist Pedro Reyes for introducing it to me during a residency at The Banff Centre.
10. A note on authorship: if participants wanted credit, they were asked to sign their design, if not, they were to be credited as 'Anonymous'. If they did not wish to have their contribution included at all, they were free to take their drawing with them upon leaving. I consider the entire lab to be irreducibly

collaborative, but I did not wish to impose this view onto the great work of the participants.

11. Kluitenberg, 2011b, p. 64.
12. Besner's contribution and the rest of the contributions discussed in this section can be found posted at <http://nbimaginarymedialab.tumblr.com>.
13. Heidegger, 1977; Dean, 2009, 2010; Marx, 1977; Virilio, 1997.
14. See Crary, 2013.
15. nbimaginarymedialab, 2016a.
16. Heidegger, 1977.
17. nbimaginarymedialab, 2016b.
18. Cf. Bull, 2007.
19. nbimaginarymedialab, 2015a.
20. nbimaginarymedialab, 2015b.
21. nbimaginarymedialab, 2015c.
22. In addition to Parikka, 2012, see for instance Williams, 2003; Winston, 1998.
23. For recent examples, see Anderson and Jones, 2015.
24. Bauman, 1976, p. 17.
25. Levitas, 1990, p. 8.
26. My critiques of Foucault here draws on David Harvey, who will be discussed in more detail below. See Harvey, 2000.
27. Foucault, 1986, p. 24.
28. Tom Moylan, 1986, p. 44.
29. Lancaster, 2000, p. 114.
30. Harvey, 2000, p. 164.
31. Harvey, 2000, pp. 164-181.
32. Harvey, 2000, p. 160.
33. Harvey, 2000, p. 174.
34. Harvey, 2000, pp. 173-181.
35. Harvey, 2000, p. 186.
36. Harvey, 2000, p. 185.

5. Another Authentic Folk Is Possible

1. In this chapter, parts of the section on Woody Guthrie and the Hootenanny have been taken from a longer essay of mine, 'iHootenanny: A Folk Archeology of Social Media', which was published in issue 25 of the journal *Fibreculture*. Svec, 2015b.
2. The Invisible Committee, 2009, p. 97.
3. See, for instance, Johnson, 2003; Bronner, 2005; Hutton, 2005; Campbell, 2006; Harris, Carlson, and Poata-Smith, 2013.
4. Seeger, 2012, p. 78-79.
5. See Scorse, 2005. For a recent journalistic account of this mythology, see also Wald, 2015.
6. Grossberg, 1992, p. 225.

7. Marshall, 2007, p. 99.
8. One of the most detailed such histories in the field of folklore is Bendix, 2003. For influential discussions in the field of rock and popular music culture, see Barker and Taylor, 2007; Grossberg, 1992; Keightley, 2001; Moore, 2002; Shumway, 2007. Some of my own work elsewhere has also sought to approach 'authenticity' critically in the domains of popular music and celebrity culture: Svec, 2010, 2012, 2014.
9. Trilling, 1971, p. 3.
10. Trilling, 1971.
11. On the significance of Rousseau to the genealogy of authenticity, see Sennett, 1974.
12. Guignon, 2004.
13. Guignon, 2004, pp. 126-145.
14. E.g. Derrida, 1976; Baudrillard, 1994; Bourdieu, 1984; Foucault, 1978.
15. 'Aimee', 2011.
16. *Portlandia* only scratches the surface of the 21st century contempt for the authentic, though we could just stick with cinematic treatments of the folk revival to hammer this point home. In the film *The Song Catcher*, for example, a ballad scholar retreats from her academic position deep in the Appalachians (where her sister works at a settlement school). Though she is initially drawn to the people because they are vessels of the authentic English and Scottish ballads she has spent a career studying and teaching, she eventually falls in love with a musician in the community, and eventually leaves with him, apparently to start a career in the music business. Authenticity here is the scholarly romanticism of poverty; better to abandon those ideals and make some money. *A Mighty Wind* is a treatment of the mid-century revival rather than ballad collecting, and its critique of the scene is more to do with performative conventions, but here too we see a contempt akin to that expressed more brutally by Llewyn Davis, discussed above. *A Mighty Wind* finds comedy in the grotesque signifiers of sincerity that Llewyn had found to be pure terror.
17. Potter, 2010, p. 4.
18. Potter, 2010, p. 270.
19. Heath and Potter, 2004. For a similarly spirited critique of authenticity in consumer culture, see also Frank, 1997.
20. Potter, 2010, p. 264.
21. Althusser, 2003, 2005.
22. Adorno, 1973, p. 69.
23. For instance, an issue of *Ephemera* devoted to authenticity features scholars who consider the function of this concept in consumer culture, politics, and the 'immaterial' workplace: Anthony Ince, taking the recent rise of fascism in the United Kingdom as a case study, examines how authenticity is a crucial site of struggle in contemporary counter-hegemonic struggles; Carl Cederström unpacks the discursive power of authenticity in relation to

self-care and 'health' culture; and Michael Pederson analyses the valuation of this concept in self-promotional culture. See Cederstrom, 2011; Ince, 2011; Pederson, 2011. A more macro-sociological approach that seems to have also inspired some of this research is offered by Luc Boltanski and Eve Chiappello in their *The New Spirit of Capitalism*. They argue that the 1960s counterculture voiced two broadly distinguishable social critiques: one oriented around alienation and the question of authenticity, the other around economic justice and exploitation. The former is easily co-opted, according to Boltanski and Chiappello, and the latter is where contemporary critics and activists should continue to push their efforts. See Boltanski and Chiappello, 2007.

24. Srnicek and Williams, 2015; Williams and Srnicek, 2014.
25. Williams and Srnicek, 2014, p. 355
26. Srnicek and Williams, 2015. 'Temporary autonomous zone' is a concept introduced by Hakim Bey. Bey, 2003.
27. Srnicek and Williams, 2015, p. 181.
28. Castells, 2012, pp. 218-246.
29. Benjamin, 1999, pp. 253-264.
30. For defenses of authenticity, see also Guignon, 2004; Middleton, 2006; Lindholm, 2006.
31. Taylor, 1992.
32. Taylor, 1992, p. 72-73.
33. As is done, for instance, in Deleuze and Guattari, 1987.
34. Marx, 1961, pp. 77-78.
35. Dyer-Witheford, 2010, p. 487.
36. Dyer-Witheford, 2010, p. 487.
37. Hardt and Negri, 2000, p. 60.
38. Anderson, 1983.
39. Hardt and Negri, 2000, p. 295 (emphasis in original).
40. Hardt and Negri, 2000, pp. 280-300.
41. 'Smart mob' is a term coined by Howard Rheingold (2002), who views technology from more of a liberal perspective. Still, the concept somewhat similarly tries to grasp the relationship between embodied struggle and mobile, digital media.
42. Hardt and Negri, 2000, p. 217.
43. See Virilio, 1997; Gumbrecht, 2004; Fanon, 2008; Coulthard, 2014.
44. On Guthrie's life, see Cray, 2004; Klein, 1980.
45. For a variety of perspectives on Guthrie's work and image, see Kaufman, 2011; Partington, 2011a; Santelli and Davidson, 1999.
46. Garman, 2000, p. 95; Klein, 1980, p. 162.
47. Hampton, 1986, pp. 93-94.
48. Guthrie, 1976, p. 391.
49. Seeger, 2012, p. 49.
50. On the tensions between rural and urban in Guthrie's writings, see Partington, 2011b.

51. Guthrie, 1975, p. 126.
52. An interest to images of the machine in Guthrie's work can also be found discussed in Jackson, 2011, though I push towards a post-humanist reading of Guthrie, which Jackson does not pursue.
53. Guthrie, 1990, p. 53.
54. Guthrie, 1999.
55. Partington, 2011b, pp. 23-31; Jackson, 2011, p. 59.
56. Guthrie, 1990, p. 72.
57. Guthrie, 1990, pp. 73-74.
58. Guthrie, 1990, p. 74.
59. Guthrie, 1990, p. 74.
60. Garman, 2000, p. 111.
61. Guthrie, 1990, p. 74.
62. Quoted in Cray, 2004, p. 271.
63. Guthrie, 1990, p. 106.
64. Guthrie, 2009.
65. Battelle, 2005.
66. Seeger, 1972.
67. Cunningham and Friesen, 1999; Dunaway, 1981; Seeger, 1972.
68. See Cunningham and Friesen, 1999; Dunaway and Beer, 2010.
69. Denisoff, 1973; Reuss, 2000.
70. Cantwell, 1996, p. 140.
71. Silber, 1960, pp. 2-4.
72. Cunningham and Friesen, 1999.
73. Guthrie, 1976, p. 9.
74. Guthrie, 1968, p. 356.
75. Deleuze and Guattari, 1987. 'War machine' imagery can be found again when Guthrie describes the formation, in Pete Seeger's parents-in-law's basement, of the People Song's organization: 'I felt like I had seen something close to a miracle take place here in the house of Ohta's. This was action of the highest kind, it was fast action, fluid drive, jet propelled, and atom powered with plastic trimmings all around. It was a bunch of people working together in a field where they had all worked more or less alone before tonight' (Guthrie, 1990, p. 161).
76. Austin, 1962. I am indebted here to Homa King's article on the People's Microphone of Occupy, which he interprets using Austin. King, 2012.
77. Lastra, 2000. See also Altman, 1992.
78. Lastra, 2000.
79. For a polyphonic account of Occupy written by participants themselves, see Taylor and Gessen, 2011. For sociological accounts that pay close attention to the role of communication technology, see also Castells, 2012; Juris, 2012; Radovac, 2013.
80. To my knowledge, the only writer to make clear connections between the folk revival and Occupy in terms of diagrammatics is the novelist Jonathan

Lethem, whose novel *Dissident Gardens* weaves narratives of the proletarian movement, the counterculture and mid-century revival, and Occupy. See Lethem, 2013.

81. Ruby, 2012.
82. King, 2012, p. 239.
83. Deseriis, 2014, p. 43.
84. Deseriis, 2014, p. 43.
85. Dean, 2009.
86. As Deseriis puts it, '[T]he Mic is a con-dividual or trans-individual assemblage of enunciation whereby individual and collective enunciations are intertwined rather than set in opposition to one another. In other words, *joining the Mic means to occupy simultaneously two positions, that of medium (or relay) and that of addressee*' (Deseriis, 2012, p. 46).
87. We Are The 99 Percent, 2011.
88. Dean 2009, 2010.
89. Dean herself has been perhaps too nostalgic in her own discussions of Occupy: 'In dramatic contrast to communicative capitalism's promise of easy action, of a politics of pointing and clicking and linking and forwarding, Occupy Wall Street says No! It's not so easy. You can't change the world isolated behind your screen. You have to show up, work together, and collectively confront the capitalist class. Protest requires living bodies in the streets' (Dean, 2012, n.p.).
90. Garce, 2013; Juris, 2012.
91. Deseriis, 2012, p. 46.
92. Deseriis, 2012. Interestingly, the only critique of the People's Mic that Steve Bannon's deliriously paranoid film about Occupy, *Occupy Unmasked*, can muster is not that it was inherently problematic but that conservatives were blocked from using it. However, as others have discussed, a consistent feature of the experience of the Mic was needing to rebroadcast messages with which one disagreed. See Bannon, 2012.
93. Seeger, 2012, p. 75
94. CHARMPIT, 2017.

6. American Folk Music as Strategic Media

1. In this chapter, parts of the introduction and the SMULE section have appeared in a longer essay of mine, 'iHootenanny: A Folk Archeology of Social Media', which was published in issue 25 of the journal *Fibreculture*. Svec, 2015b.
2. Jenkins, 2006, p. 140.
3. Shapiro, 2010, p. 27.
4. Dunaway, 2010.
5. Dunaway, 2010, p. 4
6. Dunaway, 2010, p. 4.

7. Following the zeitgeist, folklorists have become interested in digital media as folk channels as well. *Journal of American Folklore* has recently begun to publish work on video games and net culture as objects of folklore: Kiri Miller has explored the folkloristic qualities of the game *Grand Theft Auto*, and Robert Glenn Howard has pondered the vernacular aspects of digital networks, taking blogging as a case study. See Howard, 2008; Miller, 2008.
8. For influential mass media critiques of this sort, see, for instance, Althusser, 1971; Horkheimer and Adorno, 2002; Debord, 1994. That which these critics had longed for appeared to others to have been retrieved (or finally discovered for the first time) through interactive digital media.
9. Rheingold, 1993.
10. Castells, 2000.
11. Jenkins, 2006, pp. 139-141.
12. Galloway, 2004. See also Galloway and Thacker, 2007.
13. See, for instance, Mosco, 2004; Andrejevic, 2007; Fuchs, 2011, 2014; Taylor, 2014.
14. See, for instance, Nest, 2013.
15. de Certeau, 2011, p. xix.
16. See Dunaway and Beer, 2010.
17. Burgess and Jean, 2009.
18. Shapiro, 2010, p. 27.
19. Shapiro, 2010, p. 27.
20. Derrida, 1987.
21. As of March 2017, he has 92.5 million followers on Twitter. He is led only by Katy Perry, who has 96.5 million. Interestingly, the 'Scooter' discovery narrative often leaves out the fact that Bieber's mother had already collaborated with a Toronto-based digital marketing company, Rapid Discovery Media, to promote his online presence. Shapiro, 2010, p. 30.
22. See Dyer, 1998; Marshall, 1997; deCordova, 2001.
23. For instance: 'I wouldn't be anywhere if it weren't for you—my fans. You are the reason I get to do what I love. [...] I have always had a real direct relationship with my fans because each of you has played an important part in helping me reach every goal I've set for myself along the way' (Bieber, 2012, p. 10).
24. De Certeau, 2011, p. xix.
25. Galloway and Thacker, 2007.
26. Greenberg, 2012.
27. Gruger, 2015, n.p.
28. Skrillex in Jensen et al., 2015.
29. Bieber in Jensen et al., 2015.
30. Kittler, 1997, pp. 147-155.
31. Smule, 2012a.
32. Caplan, 2013.
33. Ha, 2012, n.p.
34. See Tompkins, 2010.

35. Smule, 2012b.
36. Quoted in Kirn, 2009.
37. Seeger, 1972, p. 149.
38. Attali, 1985.
39. Attali, 1985.
40. Attali, 1985.
41. Attali, 1985, p. 134.
42. On the phenomenon of self-branding, see Hearn, 2008
43. Lazzarato, 1996. Vince Manzerolle has also recently explored the complex dynamics of mobile 'smart' phones in the post-Fordist workplace. See Manzerolle, 2010.
44. Dyer-Witheford, 1999; Hardt and Negri, 2000; Lazzarato, 1996.
45. Berardi, 2009.
46. Berardi, 2009, p. 89.
47. For an earlier attempt to situate music-making games within informational capitalism, see Svec, 2008.
48. Fuchs, 2010, p. 48.
49. Fuchs points to the term 'prosumer', which was coined by the futurist Alvin Toffler. Toffler, 1981.
50. Smule, 2012c.
51. Filene, 2000; Miller, 2010.
52. Dean, 2009, p. 2.
53. Dean, 2009, pp. 19-48.
54. Lovink, 2011, p. 7.
55. Rahn, 2001.
56. Miller, 2014, p. 210.
57. Devoe, 2016.
58. Maresca, 2013, n.p.
59. Jones, 2013, p. 304.
60. In addition to Jones, 2013, for a fascinating treatment of the guitar as a medium and instrument, which pays particular attention to global cross-cultural flows (and on whom Jones draws), see also Dawe, 2010.
61. E.g. Castells, 2012; Juris, 2012.
62. Miller, 2014.
63. Miller, 2014, p. 211.
64. Gul Tech Life, 2014. Interestingly, Seeger's media-theoretical hero, 'Jonny Appleseed' (see chapter 2), is the name of the incoming caller in the iPhone ad. Whereas Seeger had been interested in the seeds themselves, however, the iPhone ad seems more interested in the caster himself. Intimacy and control, over dissemination, is the trademark of this brand.
65. Bull, 2007, pp. 12-18.
66. For an excellent reading of these ads that focuses also on their articulation of racialization, see Burton, 2014.
67. Turkle, 2011.

68. Borghi, 2006.
69. Quoted in Newell, 2007.
70. Robinson, 2007.
71. Cunningham and Friesen, 1999, p. 211.

Epilogue

1. Guthrie, 1975, p. 157.
2. Szwed, 2010.
3. Cunningham and Friesen, 1999.
4. Dylan in Scorcese, 2005.
5. Coen and Coen, 2013.
6. Coen and Coen, 2013.
7. The only moment of peace he seems to find is when, after crashing one night at Dr. Gorfein's apartment (a Columbia professor), he finds a copy of an LP he himself recorded with his deceased singing partner, Mike. Llewyn gazes at the mass-produced commodity as if it was made by someone else, not him, and he puts it on the turntable. A beautiful opening track, it brings both him and us pleasure.

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